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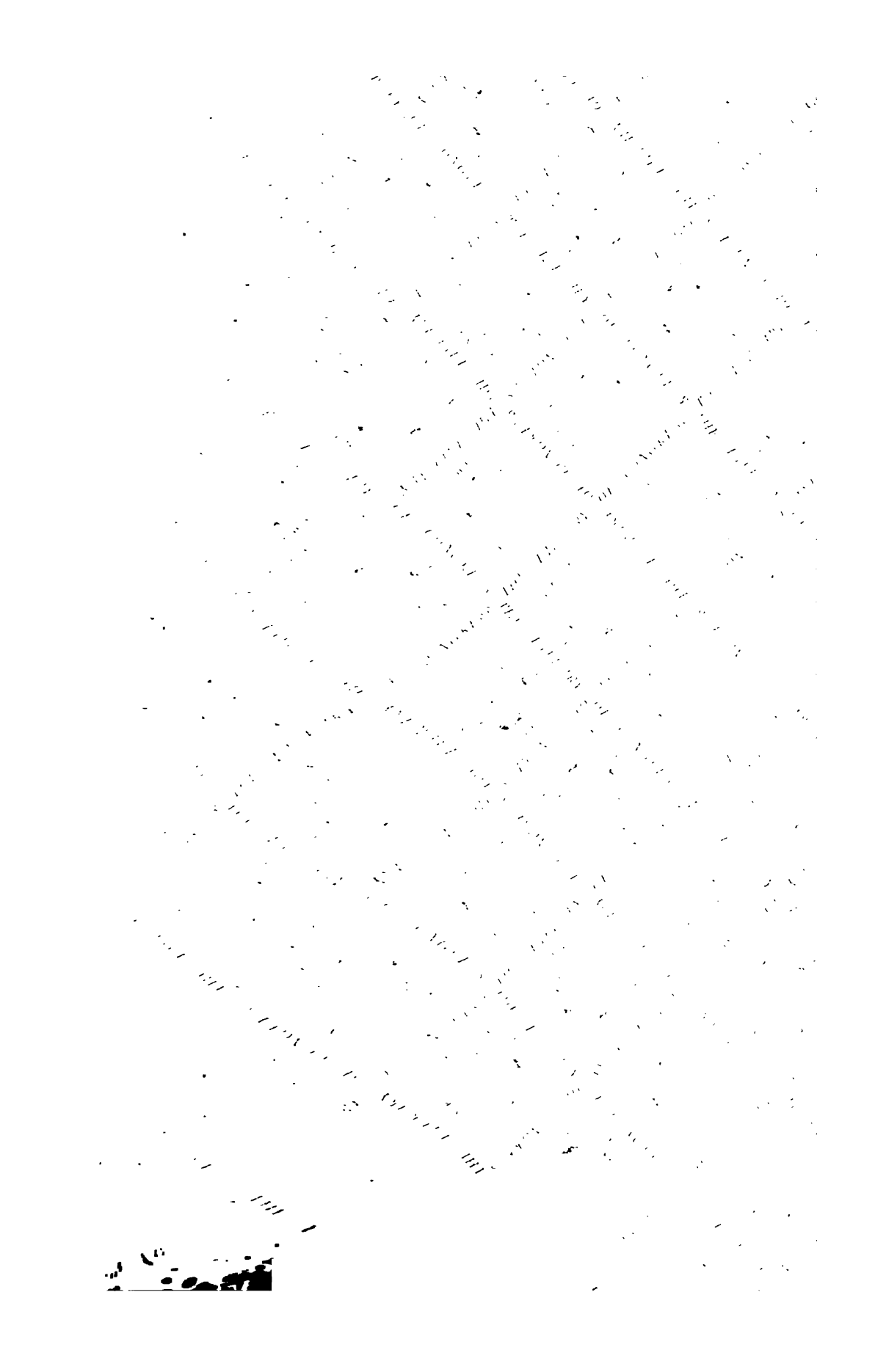

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U. S. Congress. House, Committee on ways and means

TARIFF INFORMATION, 1921

HEARINGS

ON

231

GENERAL TARIFF REVISION

BEFORE THE

COMMITTEE ON WAYS AND MEANS

HOUSE OF REPRESENTATIVES

PART I

SCHEDULE A—Chemicals, Oils, and Paints
SCHEDULE B—Earths, Earthenware, and Glassware

INDEXED

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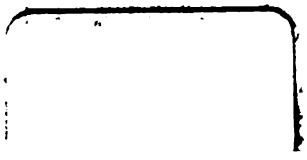
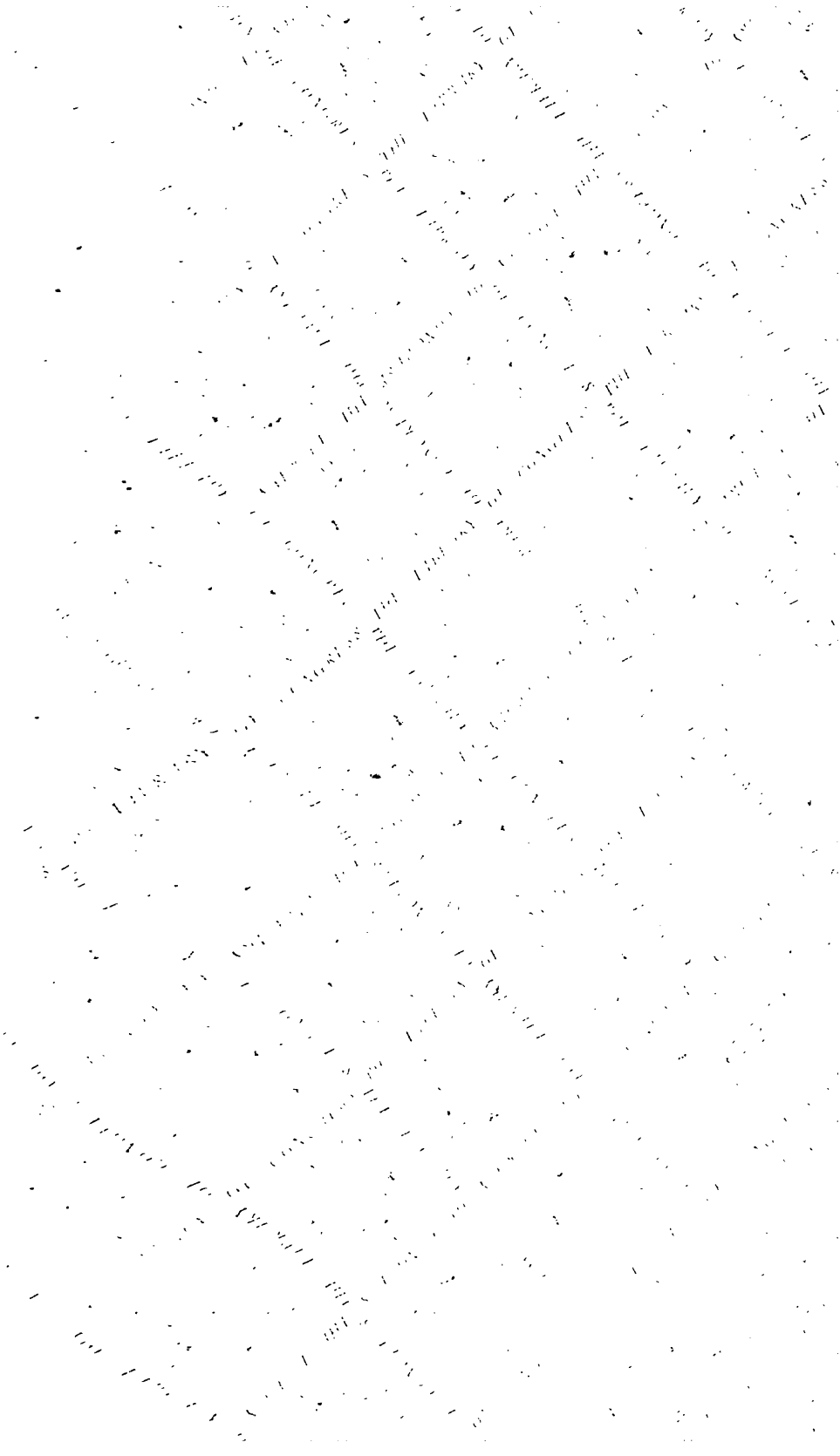
GOVERNMENT PRINTING OFFICE
1921





mitted by witnesses. All parties appearing before the committee were supplied with the daily print and requested to revise and correct their statements for this edition.

To facilitate a ready reference to the subject matter of the several schedules the oral statements and papers submitted have been grouped together, as far as practicable, under the paragraph of the present law to which they apply, sequence of statement and order of appearance thereby necessarily being abandoned.

Many letters filed with the committee have been excluded from this edition to economize in printing and reduce materially the already large size of the volumes. Effort has been made to avoid unnecessary repetition without omitting, however, any relevant matter on subjects not otherwise covered.

E. W. CAMP, *Clerk.*

SCHEDULE A.

CHEMICALS, OILS, AND PAINTS.

COMMITTEE ON WAYS AND MEANS,
HOUSE OF REPRESENTATIVES,
Thursday, January 6, 1921.

The committee was called to order by the chairman (Hon. Joseph W. Fordney) at 10 o'clock a. m.

The CHAIRMAN. Gentlemen, we will begin the hearing this morning on a revision of the present tariff act. We will call the first witness, Mr. Henry Howard.

Let me say, Mr. Howard, we are limited as to time, and the committee has fixed the dates for the hearings upon each schedule. I know it will be a disappointment to some gentlemen who come here from long distances to have their oral statements limited, but there are some 20 people to be heard to-day. We have three days for hearings on Schedule A, and 100 people want to be heard on that schedule, so it will be necessary to limit the gentlemen as to time. I want to add that if witnesses desire to file briefs, we will be glad to have them do so, and in addressing the committee if they will discuss the most important features of the briefs, it will economize in the matter of time.

CHEMICALS IN GENERAL.

HENRY HOWARD, CHAIRMAN EXECUTIVE COMMITTEE, MANUFACTURING CHEMISTS' ASSOCIATION OF THE UNITED STATES.

Mr. HOWARD. My name is Henry Howard; my address is 1300 Guardian Building, Cleveland, Ohio, and I am here representing the Manufacturing Chemists' Association of the United States. I am chairman of the executive committee of that organization.

(Mr. Howard read the following brief:)

BRIEF OF THE MANUFACTURING CHEMISTS' ASSOCIATION OF THE UNITED STATES.

The Manufacturing Chemists' Association of the United States, organized in 1872, is an association of the manufacturing chemists of this country.

Our appearance here to-day is in response to the request of your honorable committee.

In this brief we shall deal only with the features of the tariff which have general application to all our members.

This brief will be followed by briefs of our members dealing with the products and the paragraphs in Schedule A in which they are directly interested.

Our appearance, coming as it does at the beginning of the tariff hearings, puts our members in a most unsatisfactory situation because many of the products which are our raw materials will not be reached until much later in the hearings and any changes made in the tariffs on raw materials should of necessity involve compensating changes in the tariffs on finished products in the manufacture of which such raw materials have been used.

In presenting our views as to the proper rates of protection, we have, of course, been obliged to use the present rates on our raw materials as a basis, and I respectfully and earnestly urge you to give us a reasonable opportunity to revise our recommendations to meet any changes that may finally be made in the rates on any of our raw materials.

In dealing with the chemical schedule, we have omitted reference to the articles covered by the pending Longworth dyestuff bill. The Manufacturing Chemists' Association has placed itself on record as favoring the Longworth bill. The whole subject of coal-tar dyes is as you know an exceedingly complex one and has already been covered in the hearings on the Longworth bill, both in the House and Senate, and any attempt on our part would simply be unnecessary duplication and a waste of your time.

I will only say that, speaking from the point of view of the manufacturers of heavy chemicals, this new dye industry has been extraordinarily beneficial in creating a broader market for heavy chemicals such as acids, alkalis, and many miscellaneous technical chemicals, and, most important, has developed a large demand for oleum, a form of highly concentrated sulphuric acid which is essential for the production of munitions of war.

TARIFF RATES.

First. The rates must be sufficient to protect American labor—this is fundamental, and is especially urgent at the present time because we are not only confronted with the problems of protection for infant industries, developed as a result of the war, but also with the task of adequately protecting our highly paid American labor in established industries from ruinous competition with cheap European labor resulting from the combination of the vast armies of unemployed European labor and the badly depreciated European currency.

The problem in its present form is really not alone one of depreciated foreign currency or of low foreign exchange—but of low wages.

For example, German currency and German exchange are about one-eighteenth their old par value.

If German wages were now 18 times as high in paper marks as they were before the war in gold marks, the low exchange rate and depreciated currency would present little concern for us. But German wages have risen on the average only seven or eight fold in their currency, according to information sent the last of November, 1920, to the national industrial conference board by its investigator in Germany, and so, when the barriers shall be down again and trade resumed, if Germany can send her goods to America at the old prices in dollars and get 18 times as much for them in paper marks as formerly, and produce these goods by paying only 7 to 8 times as much in wages, it is manifest that what was already cheap German labor before the war has become, roughly, twice as cheap now.

Second. Tariff rates should not be placed so high that they will prohibit importation. The tariff should act in general both as an adequate protection to American labor and industry and as a source of revenue to the Government. There are, of course, important exceptions to this rule, as, for instance, when public policy demands the upbuilding of an infant industry such as the dye industry, the reasons for which are too well known to you to need repetition.

Third. In order to carry out the principles outlined in the two foregoing paragraphs it will be absolutely necessary to include in any new tariff some provision that will compensate for the unfair conditions that now exist by reason of the depreciated currency in foreign countries.

DEPRECIATED CURRENCY—INTERIM LEGISLATION.

In addition to the necessity of some similar provisions in the new tariff, we wish to call your attention particularly to the urgent necessity of immediately passing some adequate interim legislation to check and control the enormous importations that are now just getting under way, and which are sure to come to us in rapidly increasing volume especially from countries with depreciated currency. If some quick action is not taken, we may expect the country to be flooded with imports made to avoid the increases anticipated under a new tariff.

IMPORTANCE OF A HIGHLY DEVELOPED CHEMICAL INDUSTRY.

It is hardly necessary to remind you of the tremendous importance that a highly developed chemical industry bears to the prosperity of any country. Its relative development is perhaps the best index of the progress of civilization in a country.

Its high development is always accompanied by utilization of waste products and the building up and creation of new products and new industries that in many cases never existed before, all of which in the aggregate adds enormously to the wealth, prosperity, and happiness of the people, but we must not forget that development of this sort is predicated on continued systematic research carried out at great expense by the most highly trained experts obtainable, and this sort of work is only possible when the industry is in a prosperous condition because it generally requires a number of years before any adequate cash return is realized on the large sums spent in chemical research and development work.

The importance of a large well-developed industry in acids, alkalis, and coal-tar dyes in any preparedness program is so familiar to-day at the end of the war that reiteration would be unnecessary.

MEDICINAL AND MISCELLANEOUS TECHNICAL CHEMICALS.

The importance of medicinal and miscellaneous technical chemicals has been less strongly emphasized. It is, however, a very important branch of the chemical industry, viewed from the standpoint of the welfare of the Nation both in peace and war.

This industry embodies a large, varied, and continuous production of every and all kinds of medicinal supplies. The industry is of vital importance to the health of the Nation at all times; there must be a complete and comprehensive supply at all times of the normal medicinal requirements, and particularly in time of epidemic, plague, and catastrophe such as the country has witnessed from time to time. It is plain that the maintenance of this industry should be fostered to the utmost within the borders of the United States.

The industry is a necessity to the country in time of emergency, as it embraces the fundamental and basic products that are consumed by the medical departments of all the military branches of the Government—the Red Cross and similar organizations.

Aircraft depends upon the industry for the indispensable cellulose acetate, for which there is no known substitute, and similar commodities.

Photography depends primarily upon this industry for supplies.

The pyrotechnic program of the Government is founded largely on the ability of domestic manufacturers to supply miscellaneous technical chemicals.

Gas warfare, explosive caps, tracer bullets for light arms and artillery ammunition, all depend upon these products.

Even smoke screens are based on products falling within this class of material.

It is safe to say that there is not a branch of military service that is not dependent in some manner or another on products of this class of manufacture.

VALUATION OF IMPORTS.

We urge you to consider with great care the suggestion which has come from many sources, and with which we are heartily in accord, that the domestic value be taken as the basis for calculating ad valorem rates or for any rates that are in any way regulated by the value of the imported article. This procedure has been advocated by many of our leading statesmen during the past 100 years, but never in our history has there been a time when its advantages have been so apparent as at present, when we are almost the only country on a gold basis and when values in foreign markets, owing to depreciated currency, are so unstable and distorted and vary in such great degree among different countries that it would be practically impossible to intelligently write a tariff to-day that is based on foreign valuation. We therefore beg to submit as constructive suggestion the following paragraphs to cover this matter, which are based on paragraphs R and L, section 3, administrative:

"That whenever imported merchandise is subject to an ad valorem rate of duty, or to a duty based upon or regulated in any manner by the value thereof, the duty shall be assessed upon the actual market value or wholesale price thereof, at the time of exportation to the United States, in the principal markets of the United States; that such actual market value shall be held to be the price at which such merchandise is freely offered for sale to all purchasers in said markets, in the usual wholesale quantities. * * * including the value of all cartons, cases, crates, boxes, sacks, casks, barrels, hogsheads, bottles, jars, demijohns, carboys, and other containers or coverings whether holding liquids or solids, and all other costs, charges, and expenses incident to placing the merchandise in condition, packed ready for shipment, and if there be used for covering or holding imported merchandise, whether dutiable or free, any unusual article or form designed for use otherwise than in the bona fide transportation of such merchandise to the United States, additional duty shall be levied and col-

lected upon such material or article at the rate to which the same would be subjected if separately imported. That the words 'value,' or 'actual market value,' or 'wholesale price' whenever used in this act, or in any law relating to the appraisement of imported merchandise, shall be construed to be the actual market value or wholesale price of such, or similar merchandise comparable in value therewith, as defined in this act.

"That when the actual market value, as defined by law, of any article of imported merchandise, wholly or partly manufactured and subject to an ad valorem duty, or to a duty based in whole or in part on value, can not be ascertained to the satisfaction of the appraising officer, such officer shall use all available means in his power to ascertain the cost of production of such merchandise at the time of exportation to the United States, and in the United States, such cost of production to include the cost of materials and of fabrication, and all general expenses to be estimated at not less than 10 per cent, covering each and every outlay of whatsoever nature incident to such production, together with the expense of preparing and putting up such merchandise ready for shipment, and an addition of not less than 8 nor more than 50 per cent upon the total cost as thus ascertained; and in no case shall such merchandise be appraised upon original appraisal or reappraisement at less than the total cost of production as thus ascertained. The actual market value or wholesale price, as defined by law, of any imported merchandise which is consigned for sale in the United States, or which is sold for exportation to the United States, and which is not actually sold or freely offered for sale in usual wholesale quantities in the open market of the United States to all purchasers or which is not produced or manufactured in the United States shall not in any case be appraised at less than the wholesale price at which such or similar imported merchandise is actually sold or freely offered for sale in usual wholesale quantities in the country of exportation in the open market, due additions being made for estimating duties thereon, cost of transportation, insurance, and other necessary expenses from the place of shipment to the place of delivery, and a commission not exceeding 6 per cent, if any has been paid or contracted to be paid on consigned goods, or profits not to exceed 8 per cent and a reasonable allowance for general expenses (not to exceed 8 per cent) on purchased goods."

TYPE OF RATE DESIRED.

We believe that wherever it is possible specific rates should be used in place of ad valorem, thereby greatly simplifying the administration of the act. It is important, however, in many cases to provide two or more specific rates to cover different qualities; for instance, paragraph 73 of the 1909 act provided: Sulphide of soda, containing not more than 35 per cent of sulphide of soda, three-eights of 1 cent per pound; sulphide of soda concentrated or containing more than 35 per cent of sulphide of soda, three-fourths of 1 cent per pound. In the act of 1913 this dual classification was abandoned and a flat rate of one-fourth of 1 cent per pound substituted with the result that only the concentrated product, 1 pound of which was equal to 2 pounds of the crystals, was imported at a rate designed for the crystal or unconcentrated variety. This concrete instance is given as being typical of a great many and shows the advisability of providing two or more specific rates in all cases where it is possible to substitute a more concentrated or more valuable product for the one in common use at the time the tariff is written.

IMPORTATION AND REPACKING IN BOND OF ARTICLES FOR EXPORTATION AND THE ASSEMBLING WITH THEM OF DOMESTIC PRODUCTS.

Since 1914 the export of drugs, chemicals, and medicines has increased very materially so that to-day we possess a very substantial foreign trade in these articles. The business is now threatened with annihilation by competition with countries which have low labor costs and depreciated currency. It is clear that in order to hold this trade we must adopt some expediency to bridge over the time of readjustment and immediately put ourselves in a position to compete in foreign countries. It is evident that in many of the articles it will be found impossible for American manufacturers to meet the conditions which have already developed. In our opinion the common sense way of handling the problem is to hold the business by using articles of foreign manufacture when necessary. In order to do this successfully they must be imported in bond, repacked in bond and assembled in bond with the articles of domestic manufacture in which we are still able to compete.

Thus having this business still in our hands, as changing conditions permit, we can gradually introudce a larger and larger proportion of articles of American manufacture. The advantages of this plan are so obvious that we do not think further argument is necessary. We submit the following suggested changes in the law which seem to us necessary to put the above plan into operation:

(*a*) The Revised Statutes, 3018, be amended to permit the exportation of drugs, chemicals, and medicines in any quantity irrespective of the quantity in the original package or packages imported.

(*b*) The Secretary of the Treasury shall issue suitable regulations permitting the exportation from bond of the imported drugs, chemicals, and medicines packed in the same outer cases with other drugs, chemicals, and medicines similarly, and/or of domestic manufacture.

(*c*) The Secretary of the Treasury shall issue suitable regulations in respect to manufacturer's private bonded warehouses, class 2 (R. S., 2954. Customs Regulation 1915, art. 709), permitting—

(1) The ready examination, weighing, and sampling and testing of drugs, chemicals, and medicines imported and stored in such warehouses.

(2) The storage of packages, coverings, vessels, brands, containers, labels, corks, and packing material of any kind, also all apparatus suitable for weighing, measuring, or filling, whether imported or of domestic manufacturing used for the repacking of the drugs, chemicals, and medicines imported and stored in such warehouses.

(*d*) The Secretary of the Treasury shall issue suitable regulations permitting the consolidation of several "withdrawals for export" on Customs Catalogue No. 7508, "warehouses withdrawal for exportation or transportation and exportation and permit," or authorize a new form which will permit of a one consolidated "warehouse withdrawal for exportation" covering all the items in any one export shipment.

ANTIDUMPING PROVISION.

The Manufacturing Chemists' Association of the United States during the past seven years has repeatedly and consistently advocated before the committees of Congress that a law be passed protecting the American manufacturer against so-called "dumping."

At the very first hearing before the Ways and Means Committee held in January, 1913, an officer of the chemical association appeared before the committee and called the committee's attention to the so-called Canadian "dumping clause." At that time the association strongly recommended that the substance of the Canadian law be enacted as part of the tariff law of this country. The question was taken under advisement by the Ways and Means Committee, and the tariff bill introduced by Mr. Underwood, its then chairman, contained a dumping clause substantially in the form recommended by this association, the clause being contained in paragraph R of Section IV of H. R. 3321. The dumping clause referred to, however, was stricken out by the Senate when the bill came before the Senate for its consideration, and the tariff act of 1913 contained no provision covering so-called "dumping."

In the year 1916 the Manufacturing Chemists' Association again presented its views to the committees of Congress regarding the subject of dumping.

Facts were presented to the Congress by the Manufacturing Chemists' Association and a law was passed (act of Sept. 8, 1916, to increase the revenue and for other purposes—Title VIII, "Unfair competition") which contained provisions designed to protect American manufacturers against unfair competition from abroad.

CANADIAN "DUMPING CLAUSE."

The Canadian tariff law since 1907 has contained among its other provisions a provision assessing a special duty in the case of dumping. The Canadian law in substance provides that in the case of articles exported to Canada of a class or kind produced in Canada, if the export or actual selling price to the importer in Canada is less than the fair market value of the same article when sold for home consumption in the country of origin, there shall, in addition to the duties otherwise established, be levied, collected, and paid on such articles on importation into Canada a special (or "dumping") duty equal to the difference between the selling price of the article for export and the fair market value thereof for home consumption. Such special or dumping duty is levied, although the article is not otherwise dutiable. The Canadian dumping provision is limited to 15 per cent ad valorem.

It is apparent from the above that the Canadian law is not drastic. It has been in effect for 13 years. It has been amplified by decisions and regulations and the Manufacturing Chemists' Association is credibly informed from many sources that the Canadian dumping law has worked satisfactorily. So far as the Manufacturing Chemists' Association has been able to ascertain, no law yet passed by any country has had as immediate and as beneficial an effect as the Canadian law, which automatically places a fixed duty at the moment of importation.

UNITED STATES LAW—UNFAIR COMPETITION.

The Federal revenue act approved September 8, 1916, contains provisions (Title VIII, sections 800–804) regarding unfair competition which may be briefly summarized as follows:

In the first place, it is declared unlawful for any person importing or assisting in importing any articles from any foreign country into the United States, commonly and systematically to import, sell, or cause to be imported or sold such articles within the United States at a price substantially less than the actual market value of such articles at the time of exportation to the United States, provided that such act or acts be done with the intent of destroying or injuring industry in the United States, or of preventing the establishment of an industry in the United States, or restraining or monopolizing any part of trade or commerce in such articles in the United States. The penalty for the violation of this provision is fine or imprisonment.

It is further provided in the act of September 8 that if any article produced in a foreign country is imported into the United States under any agreement, understanding, or condition that the importer thereof, or any other person in the United States shall not use, purchase, or deal in, or shall be restrained in his using, purchasing, or dealing in, the articles of any other person, there shall be levied, collected, and paid thereon, in addition to the duty otherwise imposed by law, a special duty equal to double the amount of such duty.

The act of September 8 has still a third provision to the effect that whenever any country shall prohibit the importation of any article the product of the soil or industry of the United States, and not injurious to health or morals, the President shall have power to prohibit, during the period such prohibition is enforced, the importation into the United States of similar articles.

The present law of the United States is clearly an attempt to define those particular acts of "dumping" which go beyond the mere act of importing and selling at cheap prices in this country to relieve a condition of over-production abroad. To the extent that Congress has endeavored to define specifically the acts complained of, and to the extent that Congress has provided not only a criminal penalty, but also under certain conditions a doubling of tariff duties, the results can not be other than beneficial. The prime and inherent difficulty of our Federal law as it exists to-day is that, owing to the difficulties of enforcement, the law has no force or effect. It is true that the Secretary of the Treasury, under the act of September 8, 1916, has authority to make regulations. No regulations, however, have yet been made which are adequate, and it is doubtful if any regulations can be made under the existing law which are sufficiently comprehensive and at the same time sufficiently automatic in their application to render a real protection to the American manufacturers suffering from the acts complained of.

The act of Congress as it exists is in some respects modeled upon the Australian law. The Australian industries preservation act contains provision in part 2 for the "prevention of dumping." The Australian act is premised upon the same theory as the act of Congress, namely, upon the theory of unfair competition by the importation into Australia of goods with intent to destroy or injure Australian industries, the preservation of which is advantageous to the Commonwealth of Australia.

The procedure in Australia for proving an act of dumping is probably no better than our own and would seem to be cumbersome. The Australian remedy, however, would seem to be much more complete. It is provided that, upon the publication in the Australian Official Gazette of a decision against an importer, the goods in question are automatically by such publication placed on the list of prohibited imports.

CONCLUSION.

The association notes with approval the passage of the Fordney antidumping bill (H. R. 10918) through the House of Representatives, Sixty-sixth Congress, second session, and the introduction of the Smoot antidumping bill in the Senate, as indicative of the intent of Congress to legislate on this important matter, and most respectfully urges upon the Committee on Ways and Means that the next tariff act contain adequate and complete provisions along the lines of the Fordney and Smoot bills, bearing in mind that in our best judgment, no remedy against dumping will prove adequate unless it operates immediately and automatically at port of entry.

HENRY HOWARD,
Chairman of the Executive Committee.

The CHAIRMAN. With regard to those valuations, if the committee could arrange a paragraph in the law to assess duties upon the American value and not the foreign value, that would overcome those objections, would it not, and put all countries of the world on one basis with regard to the cost of production in those countries and the cost of goods laid down in this country?

Mr. HOWARD. It will help tremendously.

The CHAIRMAN. How?

Mr. HOWARD. It would certainly help tremendously. I do not know absolutely how it would be done, but it would be a great step in the right direction.

The CHAIRMAN. Well, we would have to equalize for this particular proviso in the law that the importer of goods pays duties sufficiently high to offset the difference between foreign and domestic costs; that would put every country in the world on the same basis in our markets and would give no advantage to any of the foreigners, if that could be done. It seems to me that it could be done that way. You think that over, and if you wish to comment on it in your brief we would be very glad to have you do that.

Mr. GARNER. Do you, in speaking for your association, indorse the proposition suggested by the chairman that the rate of duty which shall be assessed ought to be on what is known as an American value?

Mr. HOWARD. Yes; we strongly indorse that.

Mr. GARNER. Now, Mr. Howard, how would you determine that; would you take the Cleveland value, take the New York value, the San Francisco value, or the Galveston value——

The CHAIRMAN. I might say, perhaps, my idea would be a fair value of the costs in this country, the average value.

Mr. GARNER. That is what I mean, a fair value. Whenever you go to ascertain that, I want to know just how you are going to do it.

Mr. HOWARD. I shall be very glad to read these detailed paragraphs, if you would like to hear them, as to what we are suggesting for covering that matter.

The CHAIRMAN. We could arrive at our costs as easy as the foreign countries could arrive at their costs. We have to take their word for it, as sanctioned by the American consul, which we often find is entirel too low, especially where the duties are ad valorem duties.

Mr. HOWARD. I think the same observation applies to the foreign countries, when you are talking of that. Take, for instance, Germany; they would have the Hamburg value, the Berlin value, and the Munich value, and so on.

Mr. GARNER. But they do have a trading price in the foreign countries, I imagine.

Mr. HOWARD. We have a trading price in this country, too.

Mr. GARNER. Well, it varies at the various points, too. I imagine that in buying in the foreign markets you buy where you can get the goods the cheapest.

Now, just what is the American price? That is what I want defined. I want you to tell me just how you are going to ascertain that one fact, because if you are going to put that in the law, somebody has got to administer this law, and when you are telling them about an American price, tell me just how you are going to get that American price.

Mr. HOWARD. We shall be very glad to submit a supplementary brief, going into that matter in detail.

The CHAIRMAN. Mr. Howard, we would be very glad, indeed—I know I would and I assume the committee would be glad if you would just consider that and have a brief submitted for printing in the hearings.

Mr. HOWARD. We shall be glad to do that as soon as possible. Now, regarding that portion of my brief dealing with importation and repacking in bond, we suggest that—

(d) The Secretary shall issue suitable regulations permitting the consolidation of several "withdrawals for export" on customs catalogue No. 7508, "warehouses withdrawal for exportation or transportation and exportation and permit," or authorize a new form which will permit of a one consolidated warehouse withdrawal for exportation, covering all the items in any one export shipment.

I might say that at the present we can do a considerable part of that already; that is, we can repackage, but we must export at one time the whole amount that was imported.

Mr. GARNER. What is that—is that a law, or is that a rule laid down by the Treasury Department; or is that a statute?

Mr. HOWARD. That is the practice under Revised Statute 3018.

Mr. GARNER. Do you know any reason that the Treasury Department gives why that statute should not be amended as you suggest; have you ever had any conference with the Treasury Department about it?

Mr. HOWARD. No; we have not; I do not think that there would be any objection. I can not see why they would have any objection.

Mr. GARNER. I note that you suggest that this might be included in whatever emergency legislation might be passed. You represent—your association is quite extensive, and you have got quite a number of members, and I notice you have a good many members from the State of Pennsylvania. Do you have any hope of getting any legislation of any kind through the Senate this session?

Mr. HOWARD. Why, we were very much in hopes that the Longworth dyestuff bill would pass.

The CHAIRMAN. In other words you are asking for a reinstatement of the rates of the 1909 act.

Mr. GARNER. Upon what basis are you asking us to make that?

Mr. HOWARD. On the basis that the 1913 rates were not sufficient.

Mr. GARNER. Well, you are asking that on the basis of a tariff to exclude importation?

Mr. HOWARD. Absolutely no.

Mr. GARNER. That is in line with your suggestion, or are you suggesting that it be made in accordance with the difference in the cost of production here and abroad?

Mr. HOWARD. Nobody knows what it costs abroad.

Mr. GARNER. Then, you are guessing at a rate, therefore, merely taking advantage of the old 1909 rate rather than suggesting one that should be made on a scientific basis. You are suggesting the old 1909 rate rather than that we should make a rate on a scientific revision of the difference of costs as to production here and abroad.

Mr. HOWARD. A scientific investigation to-day would be tommyrot.

Mr. GARNER. Well, all right; then this is a guess.

Mr. HOWARD. It is a careful estimate, because we know under the rates of 1909 there were substantial imports, while under the present

rates, in 1914, before the war, importations were coming in so fast that many of our plants were shutting down.

Mr. RAINEY. You want to stop importation altogether; is that it?

Mr. HOWARD. We do not want to stop importation altogether. We believe that as a general proposition the tariff should be protective and not prohibitive.

Mr. RAINEY. You want an opportunity of increasing the price of your goods to the consumers beyond the present price: is that the reason?

Mr. HOWARD. It certainly is not. We want an opportunity to keep our plants operating and not have them shut down. Some of them are operating at a loss now.

Mr. RAINEY. Would the prices go below the present retail prices?

Mr. HOWARD. They are going down so fast that nobody knows what the prices will be in six months.

Mr. GARNER. Mr. Howard, as a representative of your association, if the difference in the costs of production here and abroad could be ascertained, would a rate of that kind be satisfactory to your association?

Mr. HOWARD. It would not. It would, of course, give us a great deal more protection than we are asking for, and we think that it would be unreasonable.

Mr. GARNER. You are not willing, then, to have a competitive market in this country?

Mr. HOWARD. I might say, so far as our selfish interests are concerned, we would be glad to have a——

The CHAIRMAN (interposing). Remember, gentlemen, that we have 27 men here that want to be heard to-day and we can not take up an argument on the tariff question in the time allotted to other gentlemen, so we will have to be very brief, because this is only a political argument anyway.

Mr. GARNER. Each man has a brief, as I understand it, and let each one of them file his brief and then we will be through with the hearing. Each man, every person present has a brief, as I understand, and if so he can file that; he can file that brief and we will then be through with the hearing.

Now, what I want to get at, unless you want to do that—and I think the questions I am asking Mr. Howard are perfectly legitimate and proper questions—I want to know whether or not if we could ascertain the difference in cost of production in this country and abroad, if that difference is enacted as the rate, whether that would be satisfactory to your association or not, and you say that it will not.

Mr. HOWARD. I said for selfish interests. Our members, I am sure, would be satisfied with it because the present cost abroad is so abnormally low, partly on account of depreciated currency, while our cost is unusually high, that I feel very confident it would give us more protection than we are asking for and more than we are justly entitled to, because conditions will be working back.

I think the rates should be based more nearly on the normal costs and then some specific provision provided in the act to take care of the depreciated currency and the unfair conditions that are existing now.

Mr. GARNER. Then, you would be willing to take a rate equal to the difference in the cost of production here and abroad?

Mr. HOWARD. Plus a fair profit.

Mr. GARNER. Plus a fair profit. That, of course, is quite a different problem. If you take the difference in the cost of production here and abroad plus a fair profit; how much would you consider that profit should be?

Mr. HOWARD. That profit in the manufacturing business is entirely different as to the different industries. It varies with every business in the country.

Mr. GARNER. Then, we would have to have a different rate for every business in the country, of course.

Mr. HOWARD. Well, that would have to be considered in making the rate.

Mr. HULL. You would fix your own profits in that event?

Mr. HOWARD. We should expect Congress to do that.

Mr. RAINEY. Were your profits greater in 1909 and 1911 than they are now?

Mr. HOWARD. I really could not say. Of course, profits which existed in most lines of business during the war were abnormal. Profits at the present moment are almost nonexistant. Conditions change. In fact, a good many companies to-day are operating at an actual loss.

Mr. RAINEY. In 1909 to 1911 were your profits greater or less than they were in 1912—1912 to 1914?

Mr. HOWARD. The 1913 tariff was just beginning to be felt, and profits were getting to a very low ebb about the time the war came on.

BRIEF OF GRASSELLI CHEMICAL CO. OF OHIO.

DEAR SIR: Referring to Schedule A, paragraph 7, muriate of ammonia, the Grasselli Chemical Co. respectfully submits for the consideration of your committee the following brief in support of a change from three-fourths cent per pound to 1 cent per pound in the duty on this article.

The present duty of three-fourths cent per pound on muriate of ammonia barely permitted the manufacture of this product in this country. The principal competition comes from Great Britain and Germany.

Imports from 1910 until 1915 were between 9,000,000 and 14,000,000 pounds. Thereafter, owing to the war, the imports rapidly decreased, but their resumption is noticeably apparent now, and we are meeting the foreign competition more strongly every day.

The production of this material consumes ammoniacal liquor manufactured in this country and which had never before been used for this purpose.

In view of the increased cost of the crude materials and labor, etc., the price of this commodity has increased and the three-fourths cent per pound duty is no longer an adequate protection, and we respectfully submit that 1 cent per pound would be a fair rate. This is practically upon a 10 per cent ad valorem basis.

This company is engaged in the manufacture and sale of heavy chemicals. It is a corporation created by the laws of the State of Ohio, and has large manufacturing plants in Cleveland, Canton, Niles, and Lockland, Ohio; Grasselli, N. J.; East Chicago, Terre Haute, and Fortville, Ind.; Beaver Falls and New Castle, Pa.; Clarksburg and Meadowbrook, W. Va.; Birmingham, Ala.; and other points; also offices and distributing stations in most of the large cities of the country. These plants represent a very large investment, and the business contributes to the livlihood of thousands of people. It is unnecessary to enlarge upon the importance of the chemical industry, as your committee is fully aware of the tremendous part it played in the recent World War, and of its vital necessity to the safety and protection of the Nation.

Since the tariff of 1897 went into effect, this company has been able to compete with the foreign manufacturer of heavy chemicals, and has added a number of new articles to its list.

We respectfully urge that the committee retain the specific rates of duty, and, wherever possible, change the ad valorem duties to specific duties—this in view of the rapidly fluctuating prices both here and abroad; and, further, because of the extraordinary and unprecedented conditions brought about by the demoralized condition of foreign exchange.

Our suggestions are based upon the premises that the existing rates on crude materials will not be increased. If the rates are increased on any of the crude materials from which this article is made, a compensating increase should be made in the rate on the finished chemical.

Referring to Schedule A, paragraph 57, the Grasselli Chemical Co. respectfully submits for the consideration of your committee the following brief in support of a change in duties from 1¼ cents per pound to 3 cents per pound on lead acetate white, and from 1 cent per pound to 2 cents per pound on lead acetate brown. These are the rates established by the act of 1909 (the Payne tariff).

During the period from 1910 to 1913 there were substantial imports, and while importations have practically ceased since the war they are beginning to show again and will, undoubtedly, increase unless the old rate is established.

Great Britain, Germany, and Belgium are the principal manufacturers of these articles.

Referring to Schedule A, paragraph 61, zinc sulphide white or lithopone, the Grasselli Chemical Co. respectfully submits for the consideration of your committee a change in the duty from 15 per cent ad valorem to 1¼ cents per pound on this article, and we recommend that the new tariff be fixed at this rate.

Large quantities of lithopone are manufactured in Germany and Belgium, and the fact that the foreign manufacturer is an active competitor in this market is evidenced by the imports which averaged 5,000,000 pounds per year for the period 1910 to 1917. The duty was specific at 1¼ cents per pound under the Payne tariff, and in view of the increased cost of labor and raw materials, we believe that a specific duty of 1¼ cents per pound would be fair at this time, and would enable us to hold our home markets against foreign competition.

Referring to Schedule A, paragraph 62, the Grasselli Chemical Co. respectfully submits for the consideration of your committee the following brief in support of a change in duty from ¼ cent per pound to 1 cent per pound on chloride of zinc and sulphate of zinc.

Under the act of 1909 the rate was 1 cent per pound and this was reduced in the act of 1913. Imports have recently been entering in larger volume, which is undoubtedly due to the condition of the zinc market abroad, as zinc enters very largely into the manufacture of these articles and its cost is reflected in the cost of the finished product.

The element of labor also enters largely into the manufacture of these products all the way from the mining of the ore, through the conversion of same into spelter, and into the finished products themselves, so any protection accorded to zinc chloride and sulphate will in a measure extend to several other industries.

We respectfully submit that in view of the increased cost of labor and other expenses incidental to manufacturing a duty of 1 cent per pound would be fair and would enable us to at least hold the home market against the foreign manufacturers.

Referring to Schedule A, paragraph 67, the Grasselli Chemical Co. respectfully submits for the consideration of your committee the following brief in support of a change in duties on the following articles:

Hyposulphite, sulphite, and bisulphite of soda: From one-fourth cent per pound to three-eighths cent per pound. Same as act of 1909.

These articles are all manufactured in large quantities abroad and are now being imported in increasing quantities. Unless adequate protection is accorded the manufacturer, it will be difficult, if not impossible, for him to hold the ground that he has gained during the war.

Sulphide of soda: From one-fourth cent per pound to ———.

Sulphide of soda, containing not more than 35 per cent of sulphide of soda: Three-eighths cent per pound. Same as act of 1909.

Sulphide of soda, concentrated or containing more than 35 per cent sulphide of soda: Three-fourths cent per pound. Same as act of 1909.

Special attention is called to sulphide of soda which is being imported in concentrated form. The foreign manufacturer has perfected the process of fusing and concentrating this product so that it contains from 60 to 62 per cent of sulphide of soda, as against the ordinary commercial article of 30 to 35 per cent. It is essential, therefore, that the differentiation contained in the act of 1909 be restored.

The domestic production has now greatly increased, owing to the establishment of the American dye industry, which is a large consumer of sulphide of sodium. For the future welfare of that most important industry it is necessary that the manufacturers of sulphide of soda be adequately protected.

The German dyestuff syndicate, which comprises all the important chemical companies, has recently renewed its agreement for a further period of 35 years, and every effort will be made to demoralize the American dye industry and the manufacture of those goods which are the crude materials for dyestuffs. Such combinations are

not permitted the American manufacturer, and his only protection is that afforded by the tariff. Hence it is vitally important that your committee provide a dequate protection to safeguard his products against such unfair competition.

Phosphate of soda: From one-fourth cent per pound to one-half cent per pound. Under the act of 1909 phosphate of soda came under paragraph 5, and was assessed at 25 per cent ad valorem, which with the value at that time, 2 to 2½ cents per pound, practically equals the one-half cent per pound which we are now asking.

Chromate and bichromate of soda: Three-fourths cent per pound to one and three-fourths cents per pound. Same as act of 1909.

The domestic production of these articles is doubled since 1914 and is more than ample to take care of the domestic market. These materials are manufactured in a large way abroad, and the protection asked for will be necessary to enable the American producer to hold the market that he has gained during the war from the foreign manufacturer.

Sulphate of soda or salt cake or niter cake: From the free list to $1 per ton. Same as act of 1909.

In past years there has always been a large surplus of this material in foreign markets and our local market would have been flooded with this material had conditions permitted its import during the past few years. The duty that we are requesting on this material will not prevent or prohibit fair competition from other countries in this product, but will simply place us on an equality in the effort to secure, supply, and retain the home market.

Sulphate of soda, crystallized, or Glauber's salt: The present duty of $1 per ton is satisfactory and we recommend that it be left unchanged.

Sulphate of soda, evaporated, anhydrous: From free list to $2 per ton.

Anhydrous sulphate of soda was not being made in this country at the time the act of 1913 was framed, so far as we know, and in consequence was not mentioned in paragraph 67 where it properly belongs. It is a special grade of sulphate of soda made by dissolving the crude article, exactly neutralizing and evaporating to dryness. The manipulations, involving as they do the use of considerable coal and labor, add greatly to the cost of manufacture and it should have at least double the protection accorded to either crude sulphate of soda or Glauber's salt. This article is made in large quantities in Germany and only adequate protection will enable the domestic manufacturer to hold the business he has worked up in the home market during the past few years. Under the circumstances, we believe the duty of $2 per ton asked for is a fair one.

Silicate of soda: This is now on the free list and we are satisfied for it to remain there unless a duty is put on soda ash from which it is made, in which case a compensating duty should be placed on silicate of soda.

E. R. GRASSELLI, *Vice President.*

BRIEF OF HEYDEN CHEMICAL CO. OF AMERICA (INC.), GARFIELD, N. J.

We understand that the Committee on Ways and Means of the House of Representatives will commence holding hearings preliminary to a general tariff revision at Washington, D. C., on January 6, 1921, and that chemicals are covered by schedule A, for which the hearing is set on January 6, 7, and 8. We therefore submit the following facts for the consideration of your committee, namely:

The Heyden Chemical Co. of America (Inc.) was formerly owned by German interests. It was taken over by the Alien Property Custodian during 1918, and sold by the custodian during 1919 to American interests, so that it is now 100 per cent American, both as to ownership and management.

The line which we manufacture consists of the following products, of which we are among the largest manufacturers in the United States. Our company has an investment in their manufacturing plant, equipment, etc., of a little over $3,000,000, and we shall probably have to face in the future a new form of competition which this company did not have to face prior to the war, namely, the competition of the Chemische Fabrik von Heyden, of Radebeul, Germany, who manufacture the same products as we do, and if they are permitted to sell their products in the United States, would doubtless market them under the name "Heyden," which trade name is one of our principal assets and cost the present stockholders approximately one-third of the total amount which they paid for the entire business.

Our trade name is so well identified with our products, among the consumers in this country, that it would warrant our German competitors making very low prices on their products, if they were allowed to market same under the name "Heyden" in this country, and this would very likely result in serious loss to our stockholders and be manifestly unfair to them.

The protection afforded by the tariff act of October 3, 1913, is wholly inadequate to protect us against the German manufacturers' competition, particularly so in view of the fact that they would be able to sell their goods in this country and receive payment in American dollars, while paying their workmen, and for all other costs incidental to the manufacture of these products in Germany, in the greatly depreciated German marks, and this condition may continue for a considerable length of time.

As a general basic proposition we believe that the rate of import duty on all of the chemical products in our line should be fixed on a basis so that the duty will equal the difference between the cost of production in this country and foreign countries, taking into consideration the difference in the rate of exchange. Colonies belonging to Great Britain have in force a preferential rate of tariff that gives the English manufacturers a great advantage over American manufacturers when competing for business in the above-mentioned colonies. Therefore, we should have sufficient tariff protection to protect us against the dumping in this market of products in our line, whether made in Canada, England, Germany, Japan, or any other foreign country.

We believe that American manufacturers, many of whom, like ourselves, are paying large income taxes, the direct result of the German acts, entitle us to a sufficient measure of protection to maintain a fair and equitable price for our products in this country. If it were possible to make such provision, in our opinion, the most desirable arrangement would be that by which no importations of chemicals from foreign manufacturers could be made until proper investigation had been completed, and a license then issued with a sufficient rate of duty to equal the difference between the cost of production for any specific chemical in this country and its cost in the country of origin from which the foreigners wish to make shipment; as it seems apparent that some more flexible regulation will be necessary than has been provided by the tariff act of October 3, 1913. In view of the excessive discount rate specific duties as have heretofore existed will not protect us.

The principal products which we manufacture, and on all of which we have from four to six active American competitors, the total combined producing capacity of all the American manufacturers being very largely in excess of the total American consumption, as will be shown by the following data, and we also give you herewith under the heading of each class of products, such information as we can supply, which we believe will be of interest to your committee and enable you to consider the subject intelligently, namely: Salicylic acid, sodium salicylate, methyl salicylate, salol, acetyl salicylic acid (aspirin), strontium salicylate, amyl salicylate, calcium salicylate, magnesium salicylate, etc.

Salicylic acid.—The base of all of the salicylates is made from phenol with caustic soda.

A recent survey which has been made jointly by several of the largest manufacturers of salicylic acid in this country, shows that the total combined producing capacity now in operation, or ready for immediate operation, is approximately three or four times the amount of the total domestic consumption, even under normal conditions.

The technical grade is used quite largely in the manufacture of dyestuffs; the refined U. S. P. grade is used most largely in medicine and as a preservative, and there is sufficient quantity of the technical grade and U. S. P. grade combined now in stock in the hands of the various manufacturers in this country to take care of all of the requirements for six to eight months or possibly longer.

If it is impracticable to provide for a more flexible arrangement that would automatically meet the conditions which will arise from time to time, we petition for a rate of 33⅓ per cent ad valorem on salicylic acid, technical and U. S. P., also on each and every one of the salicylates in the list as above enumerated, or such other finished products upon which 50 per cent or more of their cost depends upon the cost for salicylic acid.

Formaldehyde solution U. S. P., para formaldehyde U. S. P., hexamethylene tetramine U. S. P.

Formaldehyde is made from pure methyl alcohol. Para formaldehyde and hexamethylene tetramine are made from formaldehyde. The crude material—wood alcohol—from which the pure methyl alcohol is made. is derived from the carbonization of hard woods, and its economic production depends upon there being a good market for the by-products, namely, acetate of lime, charcoal, and acetone, all of which are derived from the carbonization of hard woods.

Canada has extensive hardwood forests and produces very considerable quantities of formaldehyde and its derivatives. During the past year Canadian manufacturers have dumped in the United States large quantities of formaldehyde, and American manufacturers of this commodity have found it impossible to sell their product in Canada on account of the existing Canadian duties and regulations.

Central Europe, particularly Austria-Hungary, and also Russia and Sweden have very extensive supplies of hardwood, some of which is already being used to make wood alcohol and formaldehyde.

Prior to the beginning of the war there were three formaldehyde plants in operation in this country, having a combined capacity sufficient to make all the formaldehyde required for domestic use. To-day there are nine formaldehyde plants in existence in the United States, all ready for operation, with a total combined capacity three or four times in excess of the total domestic consumption under normal conditions. Therefore, we petition that the rate of duty on formaldehyde solution U. S. P., para formaldehyde U. S. P., and hexamethylene tetramine U. S. P. be placed at 33⅓ per cent, if it is impracticable to secure some more elastic, automatic, working arrangement, as above mentioned under the heading "Salicylic acid."

Formaldehyde, in particular, is used very largely in the manufacture of dyestuffs, also as a disinfectant and as a fungicide for the treatment of seed, wheat, flax, potatoes, onions, and other agricultural products.

Benzoic acid and sodium benzoate.—Prior to the beginning of the war there was no, benzoic acid produced in this country; it was all imported from Germany or England, but at present there are six or eight well equipped plants for making benzoic acid, all ready for operation. Their total combined capacity is at least three or four times the total amount consumed in this country. Therefore, we petition for a rate of import duty not less than 33⅓ per cent on sodium benzoate and benzoic acid.

Benzoic acid is used largely in the manufacture of dyestuffs and as a preservative; sodium benzoate as a preservative and in medicine.

Saccharin.—We are one of three or four American manufacturers of this product, with a total combined producing capacity very largely in excess of the total domestic consumption. Therefore, we petition for an import duty not less than 25 per cent ad valorem.

Your committee having thoroughly studied the situation will appreciate that the highly skilled, trained labor employed in the manufacture of the above-mentioned chemical products in this country will not be content to work for the same amount or live under the same conditions that workmen in the same industries in foreign countries have to face, with which they are apparently satisfied; and as labor in one form or another constitutes the large mass of consumers in this country, it is quite necessary to have them satisfied in order to keep our country in a prosperous and healthy condition.

Your committee will also appreciate the fact that all of the apparatus used in the manufacture of the above-mentioned chemical products is now manufactured in this country, which gives employment to a very large number of highly-trained, skilled mechanics. Therefore, the manufacturers and labor situation is identical. We must have sufficient protection to enable us to operate our plants and market our finished products at a fair price in this country, or else labor must be cut down to a point where they can not live on the scale to which they are accustomed.

If there is any further data or statistics which your committee may wish us to compile, we shall be very glad to furnish the same.

F. H. CHAMBERLAIN, *President.*

BRIEF OF BURTON T. BURG, CHAIRMAN TARIFF COMMITTEE OF THE AROMATIC CHEMICAL MANUFACTURERS' ASSOCIATION.

GENTLEMEN: We are manufacturers of materials which are included in this schedule, and we respectfully ask to be heard before your honorable body, for our industry is one of the important branches of the organic chemical industries of this country that is threatened with destruction unless we receive help from our Government.

In view of the Longworth coal-tar chemical dye bill having passed your honorable body, and in view of the fact that it was the intention of the framers of that bill to include all coal tar and synthetic organic chemicals therein, and furthermore as no doubt before this bill is finally passed the original intentions will be carried out, we, as manufacturers of synthetic aromatic coal-tar chemicals, drugs, and medicinals, and other products of organic nature belonging to this class, have decided that rather than to take up so much time of your committee in rehearing our desire at the present time, would fare just as well if our hearing was postponed until such a time as the Longworth bill is disposed of.

In case the Longworth bill does not pass at this session of Congress, or should the Longworth bill fail to include all our organic chemical products as originally planned, we wish to arrange for a hearing at a later date in order to place before your honorable committee the exact situation of our industry which was built up during the war.

Our industry, due to low labor cost, low rate of foreign exchange, and the very low rate of duty is now suffering by the aggression of foreign manufacturers.

BRIEF OF COLUMBIA RAILWAY SIGNAL CO., PITTSBURGH, PA.

As a manufacturer whose interests are gravely threatened by the efforts now being made by certain American manufacturers of chemicals to procure the passage of a new tariff measure authorizing an increased duty on certain chemicals, and to which we take serious exception, we herewith, for the mature consideration of your committee, kindly submit the following, to wit:

We are users of a considerable list of chemicals, prominent among which are potassium chlorate, potassium perchlorate, barium nitrate, and strontium nitrate. And, for your further information, your attention is directed to the fact that there is only one manufacturer of potassium perchlorate in the United States, to wit, the Oldbury Electro-Chemical Co. of Niagara Falls, N. Y., their sole agents for the sale of this material being J. L. & D. S. Riker (Inc.), 19 Cedar Street, New York City. Incidentally for several years last past it has been just about impossible for anyone to obtain a quotation on this material from the Rikers, their policy, it appears, being to sell only to our competitors and, since we can not manufacture our products without this potassium perchlorate, you can readily perceive the great hardships to which we would be subjected were we forced to meet higher costs by the payment of excessive duties on potassium perchlorate imported from abroad, this being our only source of supply, and here it may be well to remark that any statement to the effect that a higher tariff, because of its presumed protective quality, would stimulate American industry to the point where the Oldbury concern would have competition in the manufacture of the perchlorate is, on the face of the returns, absurd, for the reason that the use of this chemical is almost limited and largely restricted to the manufacture of railroad fuses, and in consequence, as modern business is usually constructed, the demand for this chemical necessarily is light, though, as before stated, it is absolutely indispensable to our industrial welfare.

As to the present status of potassium perchlorate in the United States, we cordially refer you to the Federal Trade Commission's recent investigation regarding this situation, Docket No. 259, which positively demonstrates, if justice is to prevail, the utter absurdity of increasing the tariff on importations of this material. Nor, indeed, must the impression be permitted to find lodgment in the minds of the committeemen to the effect that if a higher duty be enforced, that this of itself will stimulate the American manufacture of potassium perchlorate, because any belief of this character would be wholly erroneous since the demand, by reason of its comparatively limited use, could never warrant its general manufacture.

Regarding the manufacture of strontium nitrate, the situation stands about as follows:

A well-known Delaware company is the sole manufacturer of this chemical in the United States and, already our company is at a disadvantage in the purchase of this highly essential and very necessary material which we buy in carload lots, and for these reasons: It is true that we can, if need be, purchase this chemical from the sole maker, but our past experience has demonstrated that when we do so, we are forced to pay 4½ cents to 5 cents or possibly 6 cents a pound more than our competitor pays, with the result that our purchase from this source becomes prohibitive since we absolutely can not purchase strontium nitrate at any such excessive and arbitrarily increased prices and then meet the competition we are forced to meet in the open market when it comes to the sale of our own manufactured products.

Moreover, as we understand it, strontium nitrate is produced from the raw celestite and strontianite, i. e., each being possible sources from which to manufacture the finished strontium nitrate. We also understand that this raw material is brought into the country as ship ballast and that a plant, with a capacity of 5 to 8 tons per week and furnishing employment to only six or eight men and requiring a plant investment of not exceeding $35,000 is quite sufficient for all practical purposes.

Here is an opportune moment to contemplate the wondrous benefits that will undoubtedly accrue to American industry, when this gigantic strontium nitrate enterprise becomes still further protected over and above the present 15 per cent ad valorem duty, by a further protective import tax that can never be justified from any angle, unless the aim of Congress be to abuse, mutilate, and maltreat worthy, independent industries, already suffering from over-keen internal competition, and ultimately for the further protection of huge correlated interests now already so firmly intrenched that their power circles the world, even unto the point where the existence of just, fair, and equitable civil government is itself threatened. Indeed, the suggestion of a higher tariff for the protection of the manufacturers of Strontium nitrate, strontium carbonate, barium nitrate, barium carbonate, potassium chlorate, potassium perchlorate, needles of antimony, amorphous phosphorus and many other more or less similar items (either in powdered, granulated, or crystal form) is sufficient in the minds of well informed uprejudiced manufacturers to warrant intervention by the police for

the detention of the propagandists, or, possibly, on the grounds of a conspiracy against the public's welfare. Frankly, the proposal to increase the duty on these items is enough to make the Statue of Liberty bow her head in shame and to cause plain, back-home folk to wonder if the sterling principles of free citizenship enunciated by the Declaration of Independence are to be forever crushed to earth. And, to the foregoing list may be added sulphur, rosin, soda ash, denatured alchol, shellacs, glues, calcium chloride, lead nitrate, saltpeter, etc. Far better to remove the present 15 per cent ad valorem duty.

It, of course, needs no further argument to point out the utter adsurdity of protecting an industry of this character, already, a million times over, amply protected by an enormous aggregation of capital far beyond the dreams of Solomon in his wildest moments. More particularly is this evident when, according to our advices, it is remembered that last year the standard quotation from this source was 23 cents per pound f. o. b. New York, while, we are informed, the standard quotation for this year (1921) has been made 19 cents and this, at a time, we are credibly informed, when strontium nitrate can and is actually manufactured at a cost of from 6 to 8 cents per pound.

Indeed, as above noted, this industry already enjoys the benefits and emoluments of an ad valorem duty without any compensation whatever to the users of the product, who, in turn, in many instances, are compelled to pass the charge along to the railroads (the users of fusees), the latter in turn being compelled to absorb it in their galaxy of general costs of operation, which, thank you, simply assumes the form of a little more tax on the American people generally for the maintenance of its transportation machine, the people now being already overburdened with transportation charges arising from many sources, so, in the light of things as they are, we earnestly and emphatically protest against an increase in duty on this product, especially so because the manufacturers of strontium nitrate are well able to take care of themselves, while even the 15 per cent ad valorem duty is a distinct and positive handicap to our industrial welfare and we emphatically so state it, because we have exceedingly keen competition when it comes to marketing our products, but when we seek to purchase most of our raw materials we find ourselves caught between the upper and nether millstones of highly protected chemical industries, and so why, in the name of common sense, if justice is to prevail, why, indeed, protect these chemical manufacturers by a further increase in tariff—far better reduce it.

We could, of course, analyze and elucidate this situation at much greater length, including the items of potassium chlorate, barium nitrate, strontium carbonate, amorphous phosphorus, antimony, etc., along with numerous other items, but the principle would all be the same.

Incidentally and specifically in relation to the subject of barium nitrate, kindly note this: It is true that in the case of barium nitrate some competition in its manufacture exists in the United States, but one of these concerns heretofore has used its entire output in the manufacture of other barium products, while another concern manufactures a grade of barium nitrate we are unable to use, so that, in the end, when we need barium nitrate, we are, in view of the circumstances, forced right back to where we are on strontium nitrate. Emphatically these chemical interests are not in need of protection, since, in the nature of things, they are well able to care for themselves. Indeed a colony of giants needs no protection against a colony of dwarfs.

We trust you will present this to your Committee of Ways and Means, believing that the members in their deliberations and recommendations will be actuated by a desire for the great general need of justice and that they will not permit themselves to be moved by fallacious arguments for the protection of industries that really and actually do not need it and are not under any code of ethics entitled to it.

E. A. SCHOOLEY, *Vice President.*

P. S.—Of necessity, this communication was hastily prepared, and it is probable that denatured alcohol is not included in the list of items embraced by the 15 per cent ad valorem duty. And this may or may not be true in the case of shellacs, gums, and glues, but wherever the tax is applied on the general class of commodities included in our raw materials list the principle remains the same.

BRIEF OF THE DOW CHEMICAL CO., MIDLAND, MICH.

The Dow Chemical Co. has been manufacturing bromine and bromides for 30 years, and chlorine and chlorine compounds for nearly 25 years. The plant started on a small scale and has increased its capacity from time to time. About the year 1905 the production of bromides in this country was in excess of the consumption, and we

made some shipments of bromides to England. This act incurred the displeasure of the German producers, who dispatched an agent to this country. This man came to the Dow Chemical Co.'s office at Midland and introduced himself to Mr. Dow as a director in the Deutsche-Bromkonvention (Bromine Trust), a subsidiary of the Kali Syndicate (Potash Syndicate), and informed Mr. Dow that his syndicate had secured evidence that the Dow Chemical Co. was exporting bromides. Mr. Dow replied that he knew of no law in the United States that prevented Americans from exporting bromides, whereupon this German said that he knew there was no United States law, but that he had come all the way from Stassfurt, Germany, to tell Mr. Dow that the Bromkonvention would not permit him to export bromides; that price was no consideration and had no bearing on the subject; that they would put 2 pounds of bromides in the United States for every pound that the Dow Co. exported, entirely irrespective of price.

The Dow Co. continued exporting bromides, and some time after the visit of the German consignments of bromides were landed in New York and distributed at 15 cents per pound, the price in Germany being approximately 49 cents per pound and the import duty 25 per cent ad valorem. The price in the United States at that time was about 30 cents per pound. Many jobbers stocked up on the German bromides, the Germans selling all they could at 15 cents per pound, and then reducing to 14 cents, to 13 cents, and the lowest offer being at 11 cents. This extended over a period of about three and three-fourths years, and the Dow Co. in the meantime had entirely ceased selling bromides in the United States, but continued to sell moderate amounts abroad, and during the last year of that period sold more bromides in Germany than the Germans sold in the United States, and it netted to Dow Co. very much more than the American price. The only thing that prevented the Dow Co. from being eliminated from the bromide business was the high tariff, which handicapped the Germans to such an extent that they ultimately gave up the fight.

The Dow Co. increased in size and gradually took up the manufacture of other products, including various insecticides, chloroform, and carbon tetrachloride. A few years before the beginning of the war research and development work was started for producing magnesium compounds and a plant installed, which was nearing completion when the war broke out. We were thus able to produce epsom salts and magnesium chloride in large quantities. A change was made in the design of the electrolytic cells producing chlorine, so that caustic soda was also made, and a large plant was built to furnish this product on a commercial basis.

The manufacture of salicylates was also undertaken, and during the war other plants were built and equipped for making various chemical products, including phenol, monochlorbenzol, acetic anhydride, cellulose acetate, calcium chloride, monochloracetic acid, and metallic magnesium.

Before the outbreak of the war 316 men were employed. During the war the number of employees was as high as 2,200. A few months after the armistice the number dropped to 800 and was gradually increased to 1,100, at which number it remained until six months ago, when business commenced to decline, and in November, 1920, it was necessary to close down a large part of the plant. At the present time about one-third of the plant is running and many of the 701 employees now working are on part time.

We appeared at the hearing of your committee on January 6, 1921, and made statements regarding bromine, bromides, chloroform, and carbon tetrachloride. Permission was granted to submit briefs covering other products, and we therefore present the following:

Paragraph 2, acetic anhydride: Present rate, 2½ cents per pound; suggested rate, 10 cents per pound, based on 100 per cent strength.

Acetic anhydride is used in the manufacture of acetyl salicylic acid (aspirin), also in the manufacture of cellulose acetate, a noninflammable substance used in moving-picture films, and as a "dope" or varnish for airplane wings. The present duty of 2½ cents per pound has been in effect since 1909, but did not result in the firm establishment of an acetic anhydride industry in this country. The war made its manufacture here imperative, and sufficient production was achieved to supply all needs of the country. During the war the Government price was 85 cents per pound for 85 per cent strength. The market price at present is about 45 cents per pound. Its importance in the production of "dope" and in the manufacture of aspirin should warrant ample protection being given to this industry, new in the United States, in order that these products may continue to be manufactured in this country rather than imported.

Chlorhydrin or ethylene chlorhydrin: Suggested rate, 7 cents per pound, plus 30 per cent ad valorem.

Chlorhydrin is a rare chemical made only in small amounts. It sells for about $2 per pound. The duty asked is small compared to selling price. It is used as a basis in the manufacture of local anesthetics for minor surgery and fine chemicals. Production in this country only recently started, and protection is asked to enable the industry to be firmly established; otherwise competition from Germany will stifle the industry and consumers in the United States be forced to pay higher prices later.

Schedule C, "Metals and manufactures of," paragraph 143, magnesium metal: Present duty, 25 per cent ad valorem, suggested rate, 10 cents per pound, plus 15 per cent ad valorem.

Magnesium metal was not made in the United States prior to the war, the entire supply being imported from Germany. It is a metal somewhat similar to aluminum but only two-thirds its weight. It was used in large quantity by the Germans during the war in the construction of airplanes and Zeppelins. The Allies had not developed the use of magnesium in airplane construction during the war, but both the Allies and the Germans used it in large quantities for star shells, flares, tracer bullets, etc. Development work for its manufacture in structural shapes and castings is proceeding rapidly, and it is believed that this metal will be used in large quantities in this country in the airplane and automobile industries in the future on account of its lightness combined with the strength of certain of its alloys.

So far as the United States is concerned, magnesium metal is still in the "infant industry" class both as regards its manufacture and use.

Paragraph 5, magnesium chloride: Present rate, 15 per cent ad valorem; suggested rate, ½ cents per pound, plus 30 per cent ad valorem.

Magnesium chloride is the principal raw material from which magnesium metal is made. It is also extensively used in building construction, for flooring, and for stucco work. It was not manufactured in this country prior to the war, all of our supplies being imported from Germany, where it is produced as a by-product of the potash industry. It is now made in this country by three companies, their plants being of sufficient capacity to supply the entire requirements of the United States. However, it is a comparatively new industry and should receive protection from German competition. German labor is being paid 45 cents per day, gold basis, and labor in the United States $5 per day.

Magnesite, crude: Present duty, free; suggested duty, $10 per ton.

Calcined magnesite: Present duty, free; suggested duty, $15 per ton.

American calcined magnesite deposits have been developed since the beginning of the war, and are now supplying the demand for magnesium, both for metallurgical use and for use in the manufacture of stucco and flooring.

Paragraph 5, ferric chloride: Present rate, 15 per cent ad valorem; suggested rate, 1 cent per pound, plus 30 per cent ad valorem.

Ferric chloride is used in medicine and also in the industries, principally in photo-engraving. Chlorine is used in its manufacture.

Paragraph 57, arsenate of lead: Present duty, 20 per cent ad valorem; suggested rate, ½ cent per pound on the dry powder, or figured to dry basis if in paste form, plus 30 per cent ad valorem.

Arsenate of lead is one of the most important insecticides, and is produced in two forms –as a paste, or in dry or powdered form. Some processes for its manufacture use chlorine. An average of 10,000,000 pounds of arsenate of lead is used annually in the United States.

The small duty asked for is to partially offset the difference between the cost of labor in Germany and the United States.

Calcium arsenate: Suggested rate, ¼ cent per pound.

Calcium arsenate is an insecticide, being used in constantly increasing quantities for combatting the cotton-boll weevil. Five million pounds calcium arsenate were used in the United States during the year 1920.

Paragraph 5, carbon bisulphide: Present duty, 15 per cent ad valorem; suggested rate, ½ cent per pound, plus 15 per cent ad valorem.

Business firmly established. Duty asked is to equalize labor cost here and abroad. This product is a necessary raw material in the manufacture of carbon tetrachloride. which is recognized by the War Trade Board as an essential industry.

Paragraph 42, epsom salts: Present duty, $\frac{1}{10}$ cent per pound; suggested rate, 1¼ cents per pound.

Plants are already established to supply the entire requirements of the country. Protection is asked on account of difference between foreign labor cost and the higher wage paid in the United States. Epsom salts is produced in Germany as a component of the natural potash salts deposits.

Paragraph 440, calcium chloride: Present duty, free; suggested rate, $5 per ton.

Calcium chloride is used in the industries and arts in large quantities. Protection is asked to equalize with cost of foreign labor.

Monochloracetic acid: Suggested rate, 5 cents per pound, plus 30 per cent ad valorem. This product constitutes a most important intermediate in the production of indigo. It is not of the coal-tar type, but should bear a duty sufficient to protect the indigo manufacturers. It is prepared directly from acetic acid and chlorine, and thus a wider use of acetic acid is guaranteed our acetate industry. Certain developments in monochloracetic acid synthesis abroad may actually drive our monochloracetic acid out of the market. With sufficient protection for a few years we feel that the American industry will develop in similar fashion to that abroad, and possibly the trichlorethylene synthesis will gain sway in this country. Until that time a protection for chloracetic is a protection for acetic and particularly for the numerous flavoring products and perfumes made therefrom.

Procaine (novocaine): Suggested rate, $3 per pound, plus 30 per cent ad valorem. The preparation of this local anesthetic has been undertaken by three or four companies in the United States, operating under a license from the Chemical Foundation (Inc.). The product requires very great care in its manufacture. No one can sell it for less than $16 to $18 a pound. The German product may be prepared for somewhat less owing to the low price of the intermediates required in the manufacture. In Germany one of these intermediates is used in a particular indigo synthesis.

We ask that a protection be given to the American manufacturer of procaine (novocaine) to the extent at least of $3 per pound, plus 30 per cent ad valorem.

JAMES T. PARDEE, *Vice President.*

BRIEF OF THE CARBIDE & CARBON CHEMICALS CORPORATION, NEW YORK.

As manufacturers of certain organic chemicals, we desire to submit for your consideration the following:

The processes of this company are founded upon the utilization of natural and manufactured hydrocarbon gases and represent a new industry in this country, which will supply an extensive line of solvents, heavy chemicals, dye intermediates, and fine chemicals for the general and pharmaceutical trade. This industry is one, furthermore, which, in time of war, can almost immediately be put to the production of the requisite compounds for the manufacture of toxic gases for military purposes.

Some of the products of our industry are at present standard articles of the chemical trade. such as acetic acid, acetone, and ether, while others are relatively new in this country, although fairly well known and commercially in use in parts of continental Europe, such as, to mention a few only, ethylene dichloride, chlorhydrin, and ethylene glycol.

Certain of these products are specifically covered by various paragraphs of Schedule A of the tariff act of 1913, while the others would fall under the omnibus clause of paragraph No. 5 of that schedule.

In view of the fact that this industry is a new one in the United States, it requires adequate tariff protection to enable it to maintain itself as against the competition of foreign producers, who have the benefit not only of lower labor costs but also of established production.

In the present tariff act, however, in spite of the apparent protection afforded by the omnibus clause above referred to, there is danger that some of these chemical of foreign manufacture might enter duty free under paragraph 561, which provides, among other things, for the free admission of "petroleum, crude or refined, and all products obtained from petroleum, including kerosene, benzine, naphtha, paraffin, and paraffin oil."

We do not believe that it was ever the intent of the framers of the 1913 tariff act that chemical products, which form the basis of an essentially different industry from that of petroleum, should be subject to free entry under the provision quoted. Yet the developments in the field of commercial chemistry in the last few years have shown that some chemicals, particularly certain ones identical with or similar to those derived from the coal-tar pitches and oils for the dye industry, may be produced from petroleum products.

To the end, therefore, that there may be no uncertainty in any new tariff act in this matter, we suggest that paragraph 5 of Schedule A be amended to read as follows, the inserted phrase being in italics:

"5. Alkalies, alkaloids, and all chemical and medicinal compounds, preparations, mixtures and salts, and combinations thereof not specially provided for in this section, *including all the foregoing from whatever source derived or manufactured, 30* per centum ad valorem."

We also suggest certain other changes, the proposed amended portion in each case being in italic, designed to bring under specific mention in appropriate paragraphs certain chemicals, all of which have uses or properties similar to other chemicals now mentioned in those paragraphs, as follows:

"29. Ethers: Sulphuric, 4 cents per pound; amyl nitrite, 20 per centum ad valorem; amyl acetate and ethyl acetate or acetic ether, 5 cents per pound; ethyl chloride *and diethyl sulphate, 30* per centum ad valorem; ethers and esters of all kinds not specially provided for in this section, *30* per centum ad valorem: *Provided*, That no article containing more than 10 per centum of alcohol shall be classified for duty under this paragraph."

(NOTE.—Diethyl sulphate has uses similar to ethyl chloride as an ethylating agent.)

"33. Fusel oil or amylic alcohol, — cents per pound; *isopropyl alcohol, 30 per centum ad valorem.*"

(NOTE.—Isopropyl alcohol has uses similar to ethyl alcohol, except that it is nonpotable and therefore does not require denaturizing.)

We further suggest the inclusion in the so-called dye bill (H. R. 9078, 66th Cong., 2d sess.), in Group II, of certain additional chemicals used in the dye industry and related industries, the inserted articles being in italics, as follows:

"Group II. Acetanilid * * *, brombenzol, *chloracetic acid*, chlorbenzol, * * * dichlorphthalic acid, *diethylanilin*, dimethylanilin, * * *, ethylbenzyl anilin, *ethylene chlorhydrin, ethylene dichloride, ethylene glycol*, hydroxyphenylarsinic acid, metanilic acid, methylanthraquinone, *monoethylanilin*, naphthylamin, * * *, phthalimid, *propylene chlorhydrin, propylene dichloride, propylene glycol*, resorcin * * *; all other products by whatever name known which are employed in the manufacture of any of the products provided for in Group II or III and which are obtained, derived, or manufactured in whole or in part from any of the foregoing or from any of the products provided for in Group I *or from hydrocarbon gases* * * *; all the foregoing not colors, * * *, and not otherwise specially provided for in this title, 40 per centum ad valorem."

In such parts of the present tariff act as we have quoted and have left the duties either as they now stand, or in blank, we do not wish to be understood as expressing any opinion or suggestion as to such rates of duty, but simply that all such rates should be fixed as the committee may decide.

L. H. DAVIS.

MEDICINAL CHEMICALS AND PREPARATIONS.

[Paragraphs 1, 5, 14, 16, 17, 19, 38, 65, 584, and 616.]

A. G. ROSENGARTEN, OF POWERS-WEIGHTMAN-ROSENGARTEN CO., PHILADELPHIA, PA.

Mr. Chairman and gentlemen of the committee, I have prepared a brief here and I will just mention the principal schedules suggested. Paragraph 14, calomel, corrosive sublimate, and other mercurial preparations; present duty, 15 per cent ad valorem. Of course, it is impossible to suggest rates, but we would suggest that a duty equivalent to the analytical percentage of mercury contained plus an ad valorem duty of at least 33⅓ per cent.

Paragraph 16, chemical and medicinal compounds and preparations, including mixtures and salts, distilled oils, essential oils, expressed oils, rendered oils, greases, ethers, flavoring and other extracts and fruit essences, all the foregoing and their combinations when containing alcohol, and all articles consisting of vegetable or mineral objects immersed or placed in or saturated with alcohol, except perfumery and spirit varnishes, and all alcoholic compounds not specifically provided for in this section, if containing 20 per cent of alcohol or less, 10 cents per pound and 20 per cent ad valorem; containing more than 20 per cent and not more than 50 per cent of alcohol, 20 cents per pound and 20 per cent ad valorem; containing more than 50 per cent of alcohol, 40 cents per pound and 20 per cent ad valorem.

Since the enactment of the 1913 tariff act the internal-revenue tax on nonbeverage alcohol has been doubled. It is therefore suggested that the rates be amended——

Mr. RAINEY (interposing). How much are you asking for?

Mr. ROSENGARTEN. We are asking for 20 cents per pound on those containing 20 per cent alcohol and 33⅓ per cent ad valorem, those containing more than 20 per cent and not more than 50 per cent of alcohol, 40 cents per pound and 33⅓ per cent ad valorem, and those containing more than 50 per cent of alcohol, 80 cents per pound and 33⅓ per cent ad valorem.

Mr. RAINEY. How much higher would that be than the Payne-Aldrich bill?

Mr. ROSENGARTEN. The Payne-Aldrich bill——

Mr. RAINEY (interposing). That was 60 cents per pound, and 25 per cent ad valorem.

Mr. ROSENGARTEN. You see this has been changed, creating a difficulty because the alcoholic contents in these preparations varies, the alcoholic contents varies.

Paragraph 19, chloroform; present duty 2 cents per pound; suggested duty 33⅓ per cent.

Paragraph 38, iodoform and potassium iodide; paragraph 515, iodine resublimated. The present duty on iodoform is 15 cents per pound, on potassium iodide 15 cents per pound, and on iodide resublimed, free. We would suggest 33⅓ per cent.

Mr. LONGWORTH. Let me ask you why you are advocating an ad valorem?

Mr. ROSENGARTEN. Because, I personally feel, that in these higher grades of chemicals an ad valorem rate is preferable rather than in the case of heavy chemicals. We prefer an ad valorem rate. I think that it affords a better protection to the American industry.

Mr. LONGWORTH. Why; when you are running the risk of a lower valuation?

Mr. ROSENGARTEN. Yes; that is one objection. We are running that risk—always running that risk on a percentage valuation.

Mr. LONGWORTH. Then, why don't you advocate a specific duty, rather than an ad valorem rate?

Mr. ROSENGARTEN. I am advocating ad valorem rates, Mr. Longworth, almost altogether, expecting that these rates will be based on the American market representing values easily obtainable.

Mr. RAINEY. Why do you want an ad valorem rate altogether on chloroform; what are you asking for?

Mr. ROSENGARTEN. Thirty-three and one-third per cent.

Mr. RAINEY. Based on the value in this country?

Mr. ROSENGARTEN. Yes.

Mr. RAINEY. What is the value in this country?

Mr. ROSENGARTEN. Forty-three cents a pound.

Mr. RAINEY. Forty-three cents a pound. Under the 1909 act you suggested a rate of 10 cents a pound?

Mr. ROSENGARTEN. That would be about equivalent to 10 cents a pound.

Mr. RAINEY. Oh, no; not at 43 cents a pound.

Mr. ROSENGARTEN. No; it would be 12 or 13 cents.

Mr. RAINEY. It would be quite a little bit higher; that is quite a difference.

Mr. OLDFIELD. How much do you say that you want on iodoform?

Mr. ROSENGARTEN. Thirty-three and one-third per cent.

Paragraph 65 relates to certain salts upon which there is now assessed 10 cents and a 10 per centum ad valorem.

We suggest the elimination of the word "bismuth" from this paragraph so that the preparations of bismuth shall automatically fall within the basket clause of 33⅓ per cent.

Mr. RAINEY. That is what happened in the Payne-Aldrich Bill, that was in the basket clause.

Mr. ROSENGARTEN. Yes, sir.

The next is paragraph 584, quinia, sulphate of, and all alkaloids or salts of cinchona bark. That is at the present time on the free list. We suggest that this item be stricken from the free list so that it may automatically fall within the basket clause.

Mr. HULL. What do you want on quinia?

Mr. ROSENGARTEN. We want that thrown into the basket clause and 33⅓ per cent.

Mr. RAINEY. How much is it now?

Mr. ROSENGARTEN. It is at the present time on the free list. In 1909 the importation was 2,330,304 ounces. For the first 10 months of 1920 the importation has been 4,724,089 ounces of cinchona alkaloids and salts, and 3,461,904 pounds of cinchona bark.

The CHAIRMAN. What is the production in this country?

Mr. ROSENGARTEN. There is made in this country about 3,000,000 ounces. The total consumption of the country is about 6,000,000 ounces. This country only produces about half of that. We are only able to produce about one-half.

Mr. GREENE. Why do you want a duty on chloroform? There is not very much chloroform imported now, is there?

Mr. ROSENGARTEN. Well, there is not at the present time, but chloroform has been imported and will be imported again and particularly with the low cost of production it is a very serious matter.

Mr. GREENE. Well, I would think that is not so very important, as there never has been any great amount of imports of chloroform during recent years.

Mr. ROSENGARTEN. The next I want to take up is paragraph 616, Strychnine or strichnin and its combinations with acids not subject to duty under this section. It is now on the free list. We suggest that this item be stricken from the free list so that it may automatically fall within the basket clause. It was formerly 15 cents an ounce under the act of 1909. We suggest that it be stricken from the free list in order that it may automatically fall within the basket clause.

Mr. HAWLEY. Have you any basis for comparison as to the costs here and abroad?

Mr. ROSENGARTEN. No, sir; I have not. I do not know what the foreign costs are. We have no way of knowing.

Mr. GARNER. Then, in drawing a tariff bill at this time the committee will be unable to take into consideration the costs of production here and abroad.

Mr. ROSENGARTEN. I do not know what ability the committee has to get the costs or to arrive at the European costs.

Mr. GARNER. We are taking testimony now in order to obtain the judgment of experts pertaining to the chemical schedule, and you gentlemen are appearing here as experts. If you gentlemen can not

tell the committee the difference in the costs of production here and abroad, I imagine nobody else in the country can. So, if the committee is going to take up the tariff bill at this time, I think that you gentlemen should come here prepared to give us the difference in the cost of production here and abroad, and that we must make our rates based on that information. That is what has happened in the past rather than what we assume now may happen in the future.

Mr. ROSENGARTEN. The cost of labor in this country has been $5 per day and in Germany, on a gold basis, labor costs are not more than 55 cents per day.

Mr. GARNER. But you told Mr. Hawley you could not give him any information as to the difference in the cost here and abroad on these various items.

Mr. ROSENGARTEN. Yes, sir.

Mr. GARNER. Now, if you can not do that, no one else can give them to the committee. Then the committee will be compelled, if it is going to undertake to write a law, to either guess at it or to take what the rates have been in the past as a basis rather than what the conditions are that are existing now, or what the conditions may exist during the next three or four years.

Mr. HAWLEY. You have actual information regarding the labor wages?

Mr. ROSENGARTEN. We have that because——

Mr. HAWLEY (interposing). And you have information regarding labor and wages in this country?

Mr. ROSENGARTEN. Yes, sir.

Mr. HAWLEY. Now, have you any information regarding the efficiency of labor in the chemical industry in Germany as compared with labor in this country?

Mr. ROSENGARTEN. We do not have at the present time, but we know that Germany was preeminent in chemical manufacturing prior to the war, and we have no reason to believe that they are not to-day.

Mr. HAWLEY. Have you any reason to believe that there is a labor shortage in Europe or in Germany, or anywhere else at the present time?

Mr. ROSENGARTEN. A shortage of labor?

Mr. HAWLEY. Do you know whether there is a shortage of labor or a serious labor condition in Europe?

Mr. ROSENGARTEN. I have no knowledge on it.

Mr. HAWLEY. And do you know whether or not their labor is efficient?

Mr. ROSENGARTEN. I have no knowledge with regard to it. I fancy that it is efficient; it always has been.

Mr. HAWLEY. Is the German chemistry industry as efficient and as productive now as before the war?

Mr. ROSENGARTEN. I am not prepared to answer that; I do not know.

Mr. LONGWORTH. What did you say the average labor and wages were in Germany?

Mr. ROSENGARTEN. I estimated it to be about 55 cents, on a gold basis. I may be low on that. Mr. Howard has some information on that. It is 75 cents, according to Mr. Howard's data on that. The German labor is 75 cents.

Mr. HAWLEY. Seventy-five cents a day on a gold basis? That is what it was stated to be in the exchange hearings.

Mr. ROSENGARTEN. Yes, sir: 75 cents. I want to correct my statement that I made to the effect that it was 55 cents.

Mr. HAWLEY. On an average wage?

Mr. ROSENGARTEN. Our average wage has been ordinarily $4 and $5 a day for common labor.

Mr. COPLEY. What percentage of costs in Germany do you estimate is represented by labor costs?

Mr. ROSENGARTEN. It is rather difficult for me to answer that question.

Mr. COPLEY. You must have some idea about it, and could probably answer better than anyone else.

Mr. ROSENGARTEN. Well, there are a certain number of heavy chemicals that are made in large quantities, and then again there are intermediates which do not require much labor, and then there are intermediates the production of which requires more, and finally with the heavier chemicals it requires a very large percentage of labor, probably 50 per cent.

Mr. COPLEY. How much?

Mr. ROSENGARTEN. Some estimate it to be about 50 per cent.

Mr. COPLEY. What do you think it would be on an average?

Mr. ROSENGARTEN. The average is probably in normal times—well, that would not vary very much.

Mr. COPLEY. Right now?

Mr. ROSENGARTEN. About 10 or 15 per cent.

The CHAIRMAN. Gentlemen, the gentleman has occupied 15 minutes and he was only allotted 10 minutes in which time to make his argument.

Mr. HULL. I wish you would insert in the hearings, if you can get the facts, about what the costs of production are here and abroad, and the source of information in order that we may have that information before us.

Mr. ROSENGARTEN. Mr. Howard has treated that subject in his brief.

BRIEF OF POWERS-WEIGHTMAN-ROSENGARTEN CO., MANUFACTURING CHEMISTS, PHILADELPHIA.

Paragraph 1. Citric acid: Present duty, 5 cents per pound. Suggested duty, 1½ cents per pound for every 1 cent per pound duty laid on citrate of lime, plus 33⅓ per cent ad valorem.

The manufacture of citric acid was introduced in this country about 50 years ago by the company which I represent, since which time it has grown into an important commodity.

Quoting from Tariff Information Series No. 13, entitled "The Acids of Paragraph 1 and Related Materials Provided for in the Tariff Act of 1913," by the United States Tariff Commission, 1920, page 22, kindly note the following statement:

"The manufacture of citric acid from citrate of lime is a relatively complex chemical operation, requiring special equipment and careful chemical control. Citrate of lime has, therefore, become an article of commerce, purchased by chemical factories specializing in the manufacture of citric acid and citrates therefrom."

Quoting from page 23 of the same document, kindly note as follows:

"Until a few years before the outbreak of the European war, almost the entire product was shipped from Sicily in the form of citrate of lime, and the manufacture of citric acid therefrom was carried out in other countries, especially the United States, France, England, and Germany. This is shown by Tables I to III, which give the exports of citrate of lime and citric acid from Italy."

Quoting from the same authority we find exports from Italy to the United States, 1913:

	Pounds.
Citrate of lime	2,561,083
Citric acid	8,818

We find in the year 1917 exports to this country from the same source—Italy:

	Pounds.
Citrate of lime	7,511,072
Citric acid	303,573

Estimates of citric acid imported for the first 10 months of the year 1920 show importation of over 1,465,000 pounds at the port of New York alone, the bulk of these importations being citric acid of Italian origin.

We beg to quote from page 31 of the above-mentioned authority, as follows:

"These articles present two distinct tariff problems. The first problem is the general one, whether these articles should be placed on the free list, or subject to a duty for the purpose of raising revenue or for the protection of an American industry. The tariff treatment is necessarily related to that of lemons, the major product of the industry, which are now given a protective duty. There is, however, a difference between the two products, lemons and citric acid, in that lemons are an agricultural product with no mechanical or technical processes, whereas the manufacture of citric acid presents new technical and commercial problems. It may be urged, further, that the full recovery of the by-products will utilize a material formerly wasted and will strengthen the lemon industry without raising the price of lemons to the public. On the other hand, it is not likely that the by-product industry will develop sufficiently to supply the entire American demand unless the duty is made so high as to result in the use of fruit of good enough quality to be salable as fresh fruit and to exclude the by-products from abroad made from cull lemons.

"The second problem is the proper relationship between the rates of duty on citrate and citric acid made therefrom. Prior to the passage of the present tariff act citrate of lime was free and the margin in favor of the acid was 7 cents per pound, which shut out the foreign acid almost entirely. The imposition of a duty of 1 cent per pound on citrate of lime did not decrease imports, and it raised over $60,000 revenue per year. At the same time that this duty became effective there was a reduction in the duty on citric acid from 7 cents to 5 cents per pound, and at about the same time there was a development of the manufacture of citric acid in Italy. The result of these changes in competitive conditions was an increase in imports of citric acid to about 15 or 20 per cent of the consumption during 1914 and 1915, an increase sufficient to furnish some competition to the domestic industry. During the last two years there has been a fall in imports, resulting in part at least from war conditions."

We therefore make the suggestion for an increase in the rate of duty.

Paragraph 1. Tannic acid or tannin: Present duty, 5 cents per pound. Suggested duty, acid (tannic), technical, including solid and semisolid gallnut extract, 10 cents per pound; acid (tannic), refined, 20 cents per pound.

Imports have ranged as follows since 1914:

Fiscal years:	Pounds.	Fiscal years:	Pounds.
1914	12,634	1917	160
1915	49,493	1918	5,432
1916	2,229	1919	96,831

Tariff Information Series No. 13, entitled "The Acids of Paragraph 1 and Related Materials Provided for in the Tariff Act of 1913," by the United States Tariff Commission, summarize, under the caption of "Tariff problems," as follows:

"These industries are necessarily dependent on imported raw materials. The crude raw materials have been on the free list in all tariff laws since 1857. If Congress should desire to raise revenue by a duty on nutgalls, a compensatory duty on extracts and decoctions of nutgalls, tannic acid, gallic acid, and pyrogallic acid would be logical.

"The adjustment of the rates on extracts and decoctions of nutgalls and on tannic acid should also be carefully considered."

We have therefore suggested the above classification and rates in respect to tannic acid, etc., with the suggestion that gallnuts, the raw material for these products, be retained on the free list.

Paragraph 5. Alkalies, alkaloids, and all chemical and medicinal compounds, preparations, mixtures, and salts and combinations thereof not specially provided for in this section: Present duty, 15 per cent. Suggested duty, 33⅓ per cent.

This is the general or basket clause, and includes all items not otherwise specifically mentioned in the tariff. This paragraph embraces a large number of miscellaneous and medicinal chemicals produced in this country and manufactured in some instances in only small quantities, but at all times requiring skillful supervision. Considerable capital is invested in this industry and a large number of skilled workmen and educated chemists are required in the production of the materials covered by this paragraph.

Quoting from page 16 of volume entitled "Summary of Tariff Information, 1920," prepared for the Ways and Means Committee, we find the following statement:

"Imports reached a maximum of $3,239,102 in 1913 and yielded a revenue of $809,775. During the war the imports decreased to a minimum of $501,627 in 1916, and increased to $1,127,846 in 1918, yielding a revenue of $169,177. This large decrease during the war may be accounted for by the shutting off of imports from Germany. That country was especially successful in producing the rarer chemicals."

We are confident that the industry can not be maintained and developed without the protection afforded by a rate of duty of at least 33⅓ per cent.

Paragraph 14. Calomel, corrosive sublimate, and other mercurial preparations: Present duty, 15 per cent ad valorem. Suggested duty, see argument below.

The importance of continuing the production of mercurial preparations in this country must be self-evident. Calomel and corrosive sublimate, the iodides of mercury, white precipitate, are largely used in medicine. Corrosive sublimate is also used to a certain extent in the arts. The present rate of duty is tantamount to no protection whatsoever.

On page 32 of Summary of Tariff Information, under the caption of "Interpretation and comments," suggestion is made that the omission of the word "medicinal," appearing in paragraph 65 of the act of 1909, effected no real enlargement of paragraph 14 of the act of 1913. We believe that upon further consideration it will be apparent that all mercurial preparations, medicinal, technical, or otherwise, should, for the sake of consistency, be included in this paragraph.

Until the duty on mercury, which appears in the metal schedule, is determined upon it is impossible to make any suggestion other than that the rate of duty assessed on the above preparations should be equivalent, first, to the percentage of duty on the analytical percentage of mercury contained, plus an ad valorem duty of at least 33⅓ per cent.

Paragraph 16. "Chemical and medicinal compounds and preparations, including mixtures and salts, distilled oils, essential oils, expressed oils, rendered oils, greases, ethers, flavoring and other extracts, and fruit essences, all the foregoing and their combinations when containing alcohol, and all articles consisting of vegetable or mineral objects immersed or placed in, or saturated with, alcohol, except perfumery and spirit varnishes, and all alcoholic compounds not specially provided for in this section, if containing 20 per cent of alcohol or less, 10 cents per pound and 20 per cent ad valorem; containing more than 20 per cent and not more than 50 per cent of alcohol, 20 cents per pound and 20 per cent ad valorem; containing more than 50 per cent of alcohol, 40 cents per pound and 20 per cent ad valorem."

Since the enactment of the 1913 tariff act the internal revenue tax on nonbeverage alcohol has been doubled. It is therefore suggested that the rates be amended as follows: Containing 20 per cent of alcohol or less, 20 cents per pound and 33⅓ per cent ad valorem; containing more than 20 per cent and not more than 50 per cent of alcohol, 40 cents per pound and 33⅓ per cent ad valorem; containing more than 50 per cent of alcohol, 80 cents per pound and 33⅓ per cent ad valorem.

The purpose of these increases is to establish duties which will offset the increased internal-revenue tax on nonbeverage alcohol.

Paragraph 19. Chloroform: Present duty, 2 cents per pound. Suggested duty, 33⅓ per cent.

We submit that the production of this commodity should, for obvious reasons, be confined to this country. We have therefore suggested that a rate of duty be imposed which is at least equal to chemicals of this class and character, and which are generally found in the basket clause, or paragraph 5, of the existing law.

Paragraph 38, iodoform and potassium iodide, and paragraph 515, iodine resublimed: Present duties, iodoform, 15 cents per pound; potassium iodide, 15 cents per pound; iodine resublimed, free. Suggested duties, iodoform, potassium iodide, iodine resublimed, 33⅓ per cent.

The rates of duty under the present tariff act for iodoform and potassium iodide are extremely low, and resublimed iodine, formerly on the dutiable list, is now on the free list.

Quoting from page 62, Summary of Tariff Information, we call attention to the following statement:

"Imports have averaged less than 100 pounds annually until 1917. For the fiscal year ending June 30, 1917, the imports were 24,357 pounds and for the same period in 1918, 65,992 pounds. The source of these imports is not indicated in Commerce and Navigation, but as the Japanese annual returns of foreign trade report 38,600 pounds of potassium iodide exported to the United States in 1917, it is probable that these imports were almost wholly from Japan."

The suggested duties are in harmony with duties which have been suggested for materials of a similar nature.

Paragraph 42. Magnesia, calcined, 3½ cents per pound; carbonate of, precipitated, 1½ cents per pound. Suggested duties, calcined, technical, ——; calcined, medicinal, 7 cents per pound; carbonate of, technical, ——; carbonate of, medicinal, 3 cents per pound.

While the act of 1909 made a distinction in the case of medicinal oxide and carbonate, the act of 1913 wiped out this distinction by omitting the word "medicinal," thereby making all forms of calcined and carbonate of magnesia dutiable at the rates mentioned above. We have endeavored above to draw a distinction between the technical and the medicinal qualities and are not making recommendations in the case of the technical articles as we are not interested in the same.

The rates suggested are those of the act of 1909.

Paragraph 47. "Opium, crude or unmanufactured, and not adulterated, containing 9 per cent and over of morphia, $3 per pound; opium of the same composition, dried to contain 15 per cent or less of moisture, powdered, or otherwise advanced beyond the condition of crude or unmanufactured, $4 per pound; morphia or morphine, sulphate of, and all alkaloids of opium, and salts and esters thereof, $3 per ounce; cocaine, ecgonine, and all salts and derivatives of the same, $2 per ounce; aqueous extract of opium for medicinal uses, and tincture of, as laudanum, and other liquid preparations of opium, not specially provided for in this section, 60 per cent ad valorem; opium containing less than 9 per cent of morphia, $6 per pound; but preparations of opium deposited in bonded warehouses shall not be removed therefrom without payment of duties, and such duties shall not be refunded: *Provided*, That nothing herein contained shall be so construed as to repeal or in any manner impair or affect the provisions of an act entitled 'An act to prohibit the importation and use of opium for other than medicinal purposes,' approved February 9, 1909."

Suggested that duties in so far as they relate to opium and opium derivatives, remain unchanged.

It is further suggested that there be stricken from this paragraph the following phrases:

"Opium containing less than 9 per cent of morphia, $6 per pound; but preparations of opium deposited in bonded warehouses shall not be removed therefrom without payment of duties, and such duties shall not be refunded."

Opium containing less than 9 per cent of morphia was originally described in this manner to identify opium for smoking purposes, but inasmuch as laws have been enacted prohibiting the importation of smoking opium, etc., it would appear that this phrase is superfluous.

The second phrase, reading "but preparations of opium deposited in bonded warehouses shall not be removed therefrom without payment of duties, and such duties shall not be refunded," appears to be without special significance, and we can see no purpose in retaining the same in the phraseology of this paragraph.

Since the enactment of the 1913 act, which increased the duties on these items, they have also been subjected to an internal-revenue tax. These commodities are now subject to higher rates of taxation than any other known commodities.

These products are, notwithstanding the abuse they have been put to, among the most important from a viewpoint of medicine. The sale and distribution of these materials are regulated by drastic internal-revenue laws.

We submit that the present duties on opium of various grades and upon the derivatives are in proper relative proportion and should remain unchanged.

Paragraph 65. "Salts and all other compounds and mixtures of which bismuth, gold, platinum, rhodium, silver, or tin constitute the element of chief value, 10 per cent ad valorem."

We suggest the elimination of the noun "bismuth" from this paragraph in order that the salts and other compounds and mixtures of which bismuth constitutes the element of chief value will automatically return to the basket clause at the suggested rate of 33⅓ per cent.

These products are very important medicinally, and we feel that they should be covered by the same rate of duty as other commodities of a similar nature.

Paragraph 584. Quinia, sulphate of, and all alkaloids or salts of cinchona bark: Present rate, free list. Suggested, that this item be stricken from the free list, so that it may automatically fall within the basket clause.

It will be observed that the suggestion is made that alkaloid quinine, salts of quinine, and other alkaloids and salts extracted from cinchona bark be stricken from the free list, whereby this class of products will automatically fall within the provisions of the basket clause.

We contend that there should exist in this country an industry equipped to supply the entire domestic demand. During the emergency which has passed into history, the country was fortunate in possessing a productive capacity which was equal to at least a portion of the requirements of the Army and the civilian population of the United States. If this had not been the case the situation would have been extremely serious. It was also fortunate that the makers were in possession of reserve stocks of bark.

We set forth herewith statement showing importations as follows:

Fiscal year.	Cinchona bark.	Cinchona alkaloids and salts.	Fiscal year.	Cinchona bark.	Cinchona alkaloids and salts.
	Pounds.	*Ounces.*		*Pounds.*	*Ounces.*
1909	3,502,385	2,330,304	1915	3,951,196	1,781,748
1910	3,805,894	2,912,196	1916	3,967,350	1,771,809
1911	4,136,354	3,102,194	1917	2,581,397	1,263,585
1912	2,935,350	3,044,238	1918	3,131,958	1,447,304
1913	3,329,973	3,237,994	1919	3,866,158	3,334,108
1914	3,654,968	2,882,003	1920 (first 10 months)	3,461,804	4,724,989

We are firmly of the opinion that if a tariff is not applied as above requested that ultimately the manufacture in this country will be abandoned and the supply for the population of this country will be surrendered to foreign production, with ultimate unfavorable results to the country at large.

Paragraph 616. Strychnia or strychnine, and its combinations with acids not subject to duty under this section: Present rate, free list. Suggested, that this item be stricken from the free list so that it may automatically fall within the basket clause.

This alkaloid and its salts are manufactured from the nux vomica bean, which is the seed of a tropical tree produced in India and Cochin China. The production of this alkaloid and its salts requires great skill and being violent poisons must be handled with meticulous care.

This paragraph in the act of 1913 was transferred from the dutiable list at 15 cents per ounce to the free list.

It is our belief that the production of this material can not be continued in this country in competition with foreign makers. We therefore ask that it be stricken from the free list.

A. G. ROSENGARTEN.

DONALD M'KESSON, SECRETARY OF M'KESSON & ROBBINS, NEW YORK CITY, AND PRESIDENT NORVELL CHEMICAL CORPORATION, PERTH AMBOY, N. J.

Mr. MCKESSON. The house of McKesson & Robbins was founded in 1833. We have 1,200 employees. Two-thirds of our manufactures are chemical and one-third pharmaceutical. Ninety per cent of our products are essentials to the public health. We have increased our business since 1914 very considerably, and when the United States entered the war practically all our extended facilities went into special war work in supplying the different Government departments with medicinals. That delayed our getting our increased facilities into regular production, because the work we did for them was not the work these facilities were intended for, so it is only since the winding up of the war work that we have been able to get our increased facilities started and in shape to meet competition, and it is necessary that on some of our products we have protection in order to enable us to maintain that work. We do not believe in asking for a tariff that is higher than is absolutely necessary to maintain the business. We do not believe in asking for a

tariff which is exclusive. We believe in healthy competition, but we want to be able to maintain ourselves.

Mr. GARNER. A tariff which would be equal to the difference in the cost of production between here and abroad would be satisfactory to you?

Mr. MCKESSON. Yes, sir.

Medicinal chemicals, owing to their nature and the care with which they have to be produced, chemicals for internal administration or hypodermic administration, require extreme purity, and therefore they can not be manufactured on a very large scale. You can not use the ordinary automatic apparatus which can be used on a large scale manufacture. The workmen have to be intelligent and skilled, they have to be very closely supervised by high-grade chemists which are very hard to obtain. Our chemical training in this country is not as high as is necessary for the type of work we do, and we have to require our chemists when we employ them to study further to increase their knowledge before they are really as efficient as they should be.

The general brief of the association has covered the matter of exchange and dumping, and in addition to that I might add that the cost of doing business here has increased very greatly, to a much greater extent than it has abroad.

It is unfortunate that Schedule A comes before the raw materials. It makes it very difficult to argue the case, to suggest rates, because we do not know what the rates will be on our raw materials, and the rates we suggest are based on the rates for raw materials now existing. Should those raw material rates be changed there will be a compensating change in the rates we suggest.

Mr. GREEN. What are your raw materials?

Mr. MCKESSON. We make several hundred items, but I will describe the raw materials in each item as I bring it up.

Mr. LONGWORTH. Can you answer the question that Mr. Copley asked of a former witness, what proportion of your cost is labor? It would, of course, be a difficult question to answer.

Mr. MCKESSON. I would say the average would be about 40 per cent or more; we went up to 75 per cent on some products. Our manufacture being almost entirely of medicinal chemicals, the cost is higher than suggested by Mr. Rosengarten previously, who also manufactures the heavier chemicals, where the cost of labor is very much lower.

Mr. LONGWORTH. It costs more to manufacture the medicinal chemicals?

Mr. MCKESSON. It is largely handwork.

Mr. LONGWORTH. What is your average wage for labor?

Mr. MCKESSON. Forty-eight cents an hour.

Mr. LONGWORTH. Eight hours?

Mr. MCKESSON. No; eight and one-half hours.

Mr. LONGWORTH. Have you any information with regard to wages in Germany in a similar line of business?

Mr. MCKESSON. I understand that they are 40 or 50 marks a day. As near as I can find out we pay from about eight to ten times as much as they pay abroad.

Mr. LONGWORTH. To-day?

Mr. McKESSON. From the best information I get. It is very conflicting.

Mr. TREADWAY. Would there be the same relative difference in the wages of the high grade, trained chemists that you speak of, that you said you had to reeducate in order to supervise your other employees?

Mr. McKESSON. I think the difference would be greater on the chemists at the present time.

Mr. TREADWAY. Even a larger per cent than 10 times?

Mr. McKESSON. Yes. The professional classes in Germany are in straits now, and they are working for very low salaries.

Another reason for protection, or, rather, another reason why there should be a great endeavor in foreign countries to export to the United States is that it is absolutely necessary for them to establish credits in the United States, even at a sacrifice, and they are going to try to get the goods in here at any price they can get them in.

Mr. HULL. In that connection, of course, if they can export their goods to any country that we buy from it will be just the same. For instance, if they can export goods to Brazil, from whom we must purchase them, it will be just the same as exporting them to this country.

Mr. McKESSON. Except that this country has the money, more money than Brazil has, and this country has the products they want to a larger extent than Brazil has. Their idea in establishing credits here is that they can purchase certain raw materials which they have not themselves.

Mr. HULL. Then they have that additional purpose in establishing credits here?

Mr. McKESSON. That is my understanding. The cost of machinery on the other side is very much lower than it is here. As a matter of fact the machinery they built abroad up to very recently was very much better than we knew how to build here. We have learned a great deal during the war. And that machinery in their plants, you must remember, was all charged off before they went into the war.

Mr. GARNER. You were talking about wages in Germany. The testimony before this committee is that whereas the wages prior to the war were, say, 5 marks a day, they were now 50 marks a day.

Mr. McKESSON. Yes.

Mr. GARNER. If the mark was worth what it was prior to the war they would be getting a larger wage than your people, so when you speak of wages in Germany, you speak of them in view of the exchange value of the mark, do you not?

Mr. LONGWORTH. You are speaking in terms of gold, are you not?

Mr. McKESSON. I am speaking in terms of gold.

Mr. GARNER. That is what I suggest; you are speaking in consideration of the exchange value of the mark.

Mr. McKESSON. I am speaking of the competitive situation.

Germany, since the war, has increased her syndicate system. They are consolidating all of their factories, and they have their pools from yellow-dog funds, and everything they had before they are working in the same way to an intensified extent. That is a situation that we can not reach on account of the Sherman law.

Mr. GARNER. You say that they have yellow-dog funds now?

Mr. McKESSON. I understand so.

Mr. GARNER. That is the first statement I have heard of that as a fact. If you have any evidence to that effect it would be very interesting.

Mr. McKESSON. It is very hard now to get any evidence.

Mr. GARNER. A mere understanding is a very indefinite term, and I, for one, would like to know very much whether the German Government is going to pursue the policy with reference to the chemical industry and other industries now that it pursued prior to the war. That is a very interesting fact to be ascertained by this country and other countries, I think, in dealing with the German Government.

Mr. HULL. Yes; and I would like you to put in there, if you can, what part of that yellow-dog fund comes out of the German treasury, because they owe about sixty-odd billion dollars now, and I want to know how much they are diverting.

Mr. McKESSON. I do not think they would tell me if I asked them.

These medicinal products are used in the treatment of the sick, and the cost of the ingredients in a prescription is very small. The greater part of the price paid for the prescription is for the skill of the pharmacist in concocting the prescription, which is very reasonable, so the change in the tariff in the case of our preparations would not make more than a slight fraction of a cent on an ordinary prescription.

There is some question as to the reason for an ad valorem. My idea in putting in ad valorem rates on some of our products is that it is impossible, with a changing situation there, with a changing exchange, with changing conditions in Germany, the possibility of a change in the German Government, to get anything that is flexible enough on a specific basis; also, if we ask for a specific tariff it may be too high later on when conditions become more equalized. If the committee prefers a specific tariff I think it would be a great advantage. It certainly is easier in our importing business to handle specific rates.

The CHAIRMAN. Do you not think that the difference between the labor cost and the raw-material cost is quite equal, in proportion to those costs in normal times, throughout the whole world at the present time? What I mean to say is, that while the costs are much higher now than they were before the war, the margins between the costs here and abroad are the same as they were before the war.

Mr. McKESSON. No; I do not think so. I think our costs here are higher.

The CHAIRMAN. Higher than they are in Europe?

Mr. McKESSON. Yes; relatively.

Mr. GARNER. Is the cost of living here higher relatively than in the other countries?

Mr. McKESSON. Yes. I think, eventually, to some extent, that will right itself.

Mr. GARNER. The statistics do not show that the cost of living is higher here than it is in Germany or even in Japan.

Mr. McKESSON. Possibly you may be better informed. I do not claim to be an economic expert.

Mr. HAWLEY. The testimony before the committee has been that labor in Germany was paid 75 cents a day, generally speaking, and in this country it varies from $3 to $5 a day.

Mr. McKESSON. That is right.

I have a brief on paragraph 5, which is the general basket clause.

The CHAIRMAN. Your time is up. Be brief in discussing those briefs.

Mr. McKESSON. I was just going through them briefly, and not read them, except by subjects.

On paragraph 5, the general basket clause, I am asking for 33⅓ per cent, for reasons already given.

On paragraph 16, covering chemical and medicinal compounds and preparations containing alcohol, I have asked for double the rate, because the present rate is a protection for the foreign manufacturer on account of the internal revenue which has to be paid for the alcohol in this country, whereas the foreign manufacturer can manufacture from duty-free alcohol.

On iodides I have asked for 33⅓ per cent, on the basis spoken of before.

On paragraph 47, opium, I have put in a brief there, revising the wording of that paragraph to take out things which are now obsolete.

On paragraph 65, bismuth salts and silver salts, I have asked for 33⅓ per cent for previously stated reasons.

Paragraph 584 covers quinine. The reasons why I would like that put in the basket clause are the same as already expressed by Mr. Rosengarten, and to strychnine the same thing applies.

On formaldehyde I have asked for 25 per cent ad valorem for formaldehyde solution containing not more than 40 per cent of formaldehyde or formaline; on hexamethylenetetramine, 33⅓ per cent ad valorem; on paraformaldehyde 33⅓ per cent ad valorem.

BRIEF OF McKESSON & ROBBINS, NEW YORK CITY.

SIR: We respectfully recommend that the duty to be levied under paragraph 5 be made 33⅓ per cent ad valorem.

Medicinal products, owing to the limited quantities used compared with technical chemicals, may not be manufactured by mechanical processes. Also, owing to the necessity for absolute purity, the closest supervision by a skilled chemist is necessary. Whenever it is possible for the chemist to delegate to a workman any part of the work it is essential that the workman be intelligent and skilled. Labor in this country is paid from four to six times as much as is paid by foreign competitors and the same condition applies to chemists.

The rate of 33⅓ per cent was arrived at as being the minimum possible to protect the industry when Germany and other European countries start to ship freely, and in consideration of differences in exchange, foreign necessity for credit balances here, labor, and other factors.

McKESSON & ROBBINS (INC.).

FREDERICK W. RUSSE, GENERAL PURCHASING AGENT, MALLINCKRODT CHEMICAL WORKS, ST. LOUIS, MO.

Mr. RUSSE. I represent the Mallinckrodt Chemical Works, of St. Louis, Mo. I have a brief, and would like to read a part of it:

We are manufacturers of a comprehensive line of fine chemicals principally used for medicinal purposes, most of which are enumerated and described by the United States Pharmacopœia. None of these chemicals are protected by patents, copyrights, or trade-marks, and the processes used are not secret but are exploited quite generally in textbooks and are widely known. We wish particularly to emphasize that our products should be distinguished, and considered separately and apart, from those manufactured for technical purposes in very large quantities, with the employment of machinery requiring few experts, and in which labor is a small part of the cost. Almost without exception, the demand for our products is such that we are unable to take advantage of the benefits derived from continuous processes or quantity pro-

duction. Instead, they are made intermittently by, or under the close supervision of, trained and expert chemists and experienced labor, the cost of which, computed on the comparatively small quantities produced per unit of apparatus, forms a very material part in the cost of production.

For many years the chief foreign manufacturers of chemicals similar to those we manufacture have been the German and Swiss, but during the war and since then the Japanese have engaged quite extensively in the manufacture of chemicals, and, we understand, have received the support of their Government for the extension of the industry. In all of these countries the cost of labor, as compared with American standards, is extremely low—the rates in Germany at the present time suffering, of course, as a result of the abnormal exchange situation, but in any event, after more normal conditions have returned, these will continue as in the past much below the American rates. We ask consideration, too, of the higher cost of our plant construction and equipment. We believe it is true that in no other country are workmen, and particularly skilled workmen, paid a rate of wage approaching anywhere near those in effect in this country, with the result that these are reflected in the cost of materials used in construction, all of which, of course, contributes to make necessary a heavy plant investment. Also, in our particular line of industry, the apparatus used is usually of our own and special design and has to be especially constructed. Our installation is, therefore, much more expensive than those industries in which standard types of machinery can be used. Among our equipment there are, moreover, a large number of pieces of apparatus that are imported, composed of metals and earthenware, all of which are provided at an increased cost as a result of the duties applying on manufactured products under their respective schedules.

Germany and all of the other European countries, as well as Japan, because of their exhausted financial condition, will be seeking export trade, and the United States, on account of its strong financial position and large opportunities, will offer the most attractive field for their exploitation. We submit, under these conditions, that the schedules provided under the act of 1913 are insufficient, especially when considered in connection with the changes that have since taken place in our economic conditions, to increase very materially prewar costs of production.

Paragraph 1: We particularly draw your attention to acid gallic, acid tannic, and acid pyrogallic, included under this paragraph.

We believe that the first two, acid gallic and acid tannic, being manufactured in China as well as in the European countries, should have specific rates of duty, as China is on a silver basis and correct information of actual market value in China is difficult to obtain. We particularly point out the increase in importations of tannic acid under the low 1913 tariff, and the unusually large quantity, namely, 96,000 pounds, imported in 1919. We also point out the two distinct grades, namely, medicinal and technical, that have been brought in, and the confusion existing between nutgall extract and the technical grade. These same arguments apply to gallic acid, which is on the market in two distinct grades. On the third product, pyrogallic acid, which at present is not manufactured in China, an ad valorem duty would be preferable.

We suggest the following schedules for gallnut products, all on the assumption that gallnuts remain free as they are at present, under paragraph 624:

Acid tannic and tannin crude, including solid and semisolid gallnut extract, 10 cents per pound.

Acid tannic and tannin refined, 20 cents per pound.

The CHAIRMAN. What were they in the Payne-Aldrich tariff law?

Mr. RUSSE. I do not recall what they were under that.

Mr. RAINEY. They were 35 cents a pound.

Mr. RUSSE. We are not asking as high as that. We are asking for 10 cents for the crude and 20 cents for the refined. If you consider that the importations for 1919 were approximately equally divided between the crude and refined, then it would average 33⅓ per cent ad valorem duty. If we take the prewar cost of gallnuts and the present cost of labor and overhead in our plant, the duty we ask for would equal 33⅓ per cent. If we take the present cost of gallnuts and the present cost of labor, the duty averages 17½ per cent. In other words, as a fair basis for estimating future costs we have taken the prewar cost of the crude material and the present cost of labor and overhead.

Mr. RAINEY. Where do we get all of our gallnuts?

Mr. RUSSE. From China. There used to be quite a number of nut galls imported from Persia, but since the war they have fallen out.

The CHAIRMAN. Do I understand that you are asking for a specific rate?

Mr. RUSSE. A specific rate. I am giving the equivalent in ad valorem. I am asking for specific rates because China values are complicated, not only by exchange fluctuations but by being on a silver basis.

The CHAIRMAN. We want you to recommend specific rates wherever you can.

Mr. RAINEY. Do you know what the importations of this tannic acid are?

Mr. RUSSE. In 1919 it was 96,000 pounds.

Mr. RAINEY. What is the domestic consumption?

Mr. RUSSE. That is a rather difficult question. I do not know how much our competitors are making in this country.

Mr. RAINEY. It is valued at what?

Mr. RUSSE. They were valued, if I remember correctly, around 35 cents. I have not the figure right here, but in our general suggestion we ask for 10 cents for crude and 20 cents for refined, calculated on the assumption that 50 per cent was refined and 50 per cent crude, which would average 33⅓ per cent.

Mr. FREAR. What amount is made by your factory?

Mr. RUSSE. I should say 150,000 pounds. I am talking without the actual figures before me.

Mr. FREAR. Nearly double the total importations.

Mr. RUSSE. Nearly double.

Mr. RAINEY. Is it not true that we bring in less than 10 per cent of the total consumption in the United States?

Mr. RUSSE. The bringing in of crude tannic acid, i. e., gallnut extract, is only a recent undertaking by China—in the last two years. Prior to that time we were not getting gallnut extract in China.

Mr. RAINEY. We brought it in as far back as 1913.

Mr. RUSSE. That was the refined, that was not the technical.

On gallic acid, we ask the same rates. The cost of the preparation of this is practically the same as acid, tannic.

On acid, pyrogallic, we ask 33⅓ per cent. Acid, pyrogallic, is much higher priced, and it is difficult to give, under the present fluctuating cost of foreign exchange, a just specific rate. Most of our chemicals are high in price. The cost of production will be lower, but they are all closely bound by the cost of the foreign exchange. If you put any specific rate on the higher priced chemicals, the ad valorem rate, as they get cheaper, will be much higher than we ask for.

Mr. LONGWORTH. You want to have a very strong reason when you advocate an ad valorem rate, under any circumstances.

Mr. RUSSE. That is the reason.

Mr. LONGWORTH. We always have had to adjust the question of undervaluation which has been very persistent in some countries abroad, and now that we have the additional problem of a fluctuating rate of exchange, when we come to trade with Germany the ad valorem rate will be a tremendous disadvantage to us in every instance. It is bad enough now in the case of other countries whose currency is much below ours.

Mr. RUSSE. The next paragraph is paragraph 5, and under that come about 90 per cent of the 1,700 articles we manufacture. Those range in price up to $36 and sometimes $50 an ounce. It is rather difficult to put a specific rate on a very expensive alkaloid that would be maintained with any degree of justice. The alkaloids particularly have increased during the war period three or four or five times, and to put a specific rate of duty on such high-priced articles would make it prohibitive when times become more normal.

Mr. LONGWORTH. Of course, there is often a necessity for having an ad valorem duty, but I have only suggested to one or two of the witnesses, asking whether there was a strong reason in the case of chloroform for an ad valorem duty, and in both cases they replied that there was no really strong reason for it. I think a very strong reason always ought to be advanced for an ad valorem duty.

Mr. OLDFIELD. Mr. Longworth talks about being very careful in putting on an ad valorem rate. Would not the reason be that the consumers might get the advantage of it?

Mr. LONGWORTH. Then let us have free trade. If the gentleman is for free trade, all right.

Mr. OLDFIELD. I am not talking about free trade, and the gentleman knows that I am not; but I suggested that the consumers might have some sort of a hearing here. If the gentleman does not care anything about the consumers, all right.

The CHAIRMAN. Has the gentleman concluded?

Mr. RUSSE. No. I will just briefly indicate the other paragraphs.

On paragraph 14, which covers mercurial preparations, we ask a duty of 33⅓ per cent over and above all duty imposed upon metallic mercury.

On paragraph 17 we request the exemption from this paragraph, which covers chemical and medicinal compounds put up in packages of 2½ pounds or less gross weight, chemical or medicinal compounds put up in packages which, because of their character or the quantity of the contents, are not suitable for general distribution.

Paragraph 30 covers extracts of gallnuts, and we respectfully direct your attention to paragraph 1, in which we made the recommendation that solid and semisolid extracts of gallnuts should be dutiable as tannic acid, crude, at 10 cents per pound. We recommend that liquid extracts or decoctions of gallnuts be made dutiable at not less than 5 cents per pound, inasmuch as the liquid extract of gallnuts may contain 60 per cent tannic acid.

On paragraph 38, covering iodoform and potassium iodide, we ask that those articles be thrown into the basket clause.

On paragraph 65, covering the salts or compounds of bismuth, we ask that they be taken out of paragraph 65, as practically all of the salts of bismuth manufactured are medicinal salts and do not enter into the technical trade. We ask that they be put in the general basket clause.

The last thing I would take up is the thing Mr. Howard has very ably presented to you, and that is the administrative feature of holding on to our foreign trade at the present time under the abnormal conditions now existing. We all know the low-priced chemicals that are emanating from Europe at the present time, from Germany, England, France, and in some cases Italy. We do not know whether it is due to the cost of production, unloading, or dumping. At any

rate, they have their catalogues and lists down in South America, and they are taking the business that we and other manufacturers have developed before the war and during the war.

We urge that the general privileges which by the act of October 3, 1913, Section IV, paragraph M and paragraph N, subsection 1, are accorded manufacturers who manufacture in bond be extended to manufacturers who desire to import drugs, chemicals, and medicines, so that same may be imported, stored in importer's private bonded warehouse, and be examined, weighed, and sampled and tested with as few restrictions as possible, and when desired be repackaged and labeled suitable for the trade for which they are intended and be exported without duty in any quantity, irrespective of the size package originally imported, and in the exportation be assembled within the same outer case with other similarly imported and repacked drugs, chemicals, and medicines or drugs, chemicals, and medicines of domestic manufacture.

(Mr. Russe concluded the reading of his brief, as follows:)

Acid gallic.—We recommend that distinction be made between the crude and refined grades, and as the cost of production is but little different from that of acid tannic, we suggest the same rates of duty, namely, crude 10 cents per pound and refined 20 cents per pound.

Acid pyrogallic.—The manufacture of this product is conducted in specially constructed and expensive apparatus, and, because of its sensitiveness to atmospheric and light influences, requires particular skill and the greatest care in its preparation. Competition heretofore has been entirely and is still practically from Europe only, and under the existing law for the time of its operation prior to the war large quantities were imported. The rate of duty provided under the act of 1913 is entirely too low and we recommend and urge that the same rate of 33⅓ per cent ad valorem as on the general line of chemicals be adopted.

Paragraph 5. Of the 1,700 articles we manufacture, over 90 per cent would be classified under this paragraph, as it is the basket paragraph of the chemical schedule, and we urgently recommend that sufficient protection be granted all articles classed under this paragraph to successfully withstand the competition of foreign manufacturers, particularly Germany and Japan, because of the higher cost of production as explained in our introduction; because of the increased cost of doing business in this country and because shipments of chemicals classified under this paragraph from both Germany and Japan have reached New York within the past few months and been offered for sale at prices below the cost of the American manufacturers. We urge that the rate of duty assessed on chemicals coming under this basket paragraph be not less than 33⅓ per cent.

Paragraph 14. This covers mercurial preparations, all of which are now dutiable at 15 per cent, but the 15 per cent is cut down to practically 5 per cent, inasmuch as mercury, the crude material, is dutiable at 10 per cent under paragraph 159. The manufacture of mercurials requires the installation of large and expensive apparatus. The products are of an exceedingly poisonous nature and require additional precautions to safeguard the health of employees. We urge as an adequate protection a duty of 33⅓ per cent ad valorem additional to any and all duty imposed upon metallic mercury.

Paragraph 17. We request the exemption from this paragraph which covers chemical and medicinal compounds put up in packages of 2½ pounds or less gross weight, chemical or medicinal compounds put up in packages which because of their character or the quantity of the contents are not suitable for general distribution. We refer especially to T. D. 38208.

Paragraph 30. This paragraph covers extracts of gallnuts, and we respectfully direct your attention to paragraph 1 in which we made the recommendation that solid and semisolid extracts of gallnuts should be dutiable as tannic acid crude at 10 cents per pound. We recommend that liquid extracts or decoctions of gallnuts be made dutiable at not less than 5 cents per pound, inasmuch as the liquid extract of gallnuts may contain 60 per cent tannic acid.

Paragraph 38. Iodoform and potassium iodide are now dutiable at 15 cents per pound. These are expensive products selling at the present time at $5 and $3, respectively. Their production involves a large plant equipment, a complicated and expensive process, and a heavy investment, because of the long time in operation.

The Japanese have been particularly active within the last few years and because of their cheap labor and low cost of production, large quantities of these products have been imported from Japan. Government statistics show that in 1918 these imports reached an aggregate of 66,000 pounds. There can be no good reason urged why these products should not receive the same duty as that provided for the general line of chemicals under the so-called general basket paragraph, and we strongly urge that these articles be included in the general basket paragraph now known as paragraph 5, provided, of course, that crude iodine remains on the free list.

Paragraph 65. We recommend and urge that the salts or compounds of bismuth be excluded from this paragraph, as practically the only salts of bismuth manufactured are the medicinal salts which should take the same rate as other medicinal chemicals under the general basket paragraph 5.

Paragraph 515 (free list). We recommend that resublimed iodine be excluded from this paragraph and, for reasons defined above under paragraph 38 in the instance of iodoform and potassium iodide, should be disposed of as therein suggested.

ADMINISTRATIVE.

Since 1914 the export of drugs, chemicals, and medicines has increased very materially and, because of the abnormal conditions prevailing in Europe at that time has included many chemicals which in normal times the United States can not expect to export as of their own manufacture. Moreover, during the period of reconstruction and liquidation now confronting the chemical industries of the world, it is certain that many of the chemicals which in normal times may successfully be exported in competition with European manufacturers will not be exported because of the abnormal conditions of exchange, wage, etc., prevailing in the European countries, and because of the extraordinary efforts these European countries are making by price inducements, dumping of surplus stocks, etc., to regain all lost trade and capture as much more as possible.

It is of the utmost importance that Congress provide means whereby the trade with foreign countries established during the last few years shall be maintained and fostered, and suitable legislation should be enacted so that chemical manufacturers may take advantage of world economic conditions in the maintenance of their foreign trade.

We urge that the general privileges, which by the act of October 3, 1913, Section IV, Paragraph M and Paragraph N, subsection 1, are accorded manufacturers who manufacture in bond, be extended to manufacturers who desire to import drugs, chemicals, and medicines, so that same may be imported, stored in importer's private bonded warehouse (class 2, R. S., 2954, Customs Regulations 1915, art. 709), and be examined, weighed, and sampled and tested with as few restrictions as possible, and when desired, be repackaged and labeled suitable for the trade for which they are intended, and be exported without duty in any quantity, irrespective of the size package originally imported; and in the exportation be assembled within the same outer case with other similarly imported and repacked drugs, chemicals, and medicines, and/or drugs, chemicals, and medicines of domestic manufacture.

To accomplish this we urge:

1. That the Revised Statutes 3018 be amended to permit the exportation of drugs, chemicals, and medicines in any quantity irrespective of the quantity in the original package or packages imported.

2. That the Secretary of the Treasury issue suitable regulations permitting the exportation from bond of the imported drugs, chemicals, and medicines packed in the same outer cases with other drugs, chemicals, and medicines similarly imported, and/or of domestic manufacture.

3. That the Secretary of the Treasury issue suitable regulations in respect to manufacturer's private bonded warehouses class 2 (R. S. 2954, Customs regulation 1915, art. 709) permitting (a) the ready examination, weighing, and sampling and testing of drugs, chemicals, and medicines imported and stored in such warehouses; (b) the storage of packages, coverings, vessels, brands, containers, labels, corks, and packing material of any kind, also all apparatus suitable for weighing, measuring, or filling, whether imported or of domestic manufacture, used for the repackaging of the drugs, chemicals, and medicines imported and stored in such warehouses.

4. That the Secretary of the Treasury issue suitable regulations permitting the consolidation of several "Withdrawals for export" on Customs Catalogue No. 7508 "Warehouse withdrawal for exportation or transportation and exportation and permit," or authorize a new form which will permit of a one consolidated "Warehouse withdrawal for exportation," covering all the items in any one export shipment.

MALLINCKRODT CHEMICAL WORKS,
O. L. BIEBINGER, *Secretary.*

FRANKLIN BLACK, REPRESENTING CHARLES PFIZER CO., NEW YORK CITY.

Mr. BLACK. Paragraph 14: "Calomel, corrosive sublimate, and other mercurial preparations." Present duty is 15 per cent ad valorem. (Par. 159, quicksilver, 10 per cent ad valorem.)

The crude material for the manufacture of the mercurial preparations is quicksilver, or otherwise called mercury.

The principal mercurial preparations are calomel, corrosive sublimate, and red precipitate, and these contain respectively 85½ per cent mercury, 75 per cent mercury, and 92½ per cent mercury.

Before expressing an opinion as to what adequate protection should be provided for the mercurial preparations, it will be necessary to know what change in duty, if any, shall be made in mercury itself. With the existing duties of 10 per cent ad valorem on quicksilver and 15 per cent ad valorem on the mercurial preparations, it will not pay manufacturers of these preparations to operate in the United States, but it will be more profitable for them to operate in England and pay the existing duty into the United States of 15 per cent on the preparations, because the cost of production of corrosive sublimate, calomel, red precipitate, etc., is much less in England than in the United States; in fact, had it not been for conditions existing during the war period the American manufacturers would have been forced to abandon the production of mercurial preparations and have them made abroad.

Paragraph 1, citric acid, present duty 5 cents per pound.

Paragraph 41, lime, citrate of, present duty 1 cent per pound.

In the manufacture of citric acid the principal crude material is citrate lime.

As it requires about 1¾ pounds citrate lime to produce 1 pound citric acid, and as the present duty on citrate lime is 1 cent per pound, this equals therefore 1¾ cents per pound on the citric acid contents, and as the present duty on citric acid is 5 cents per pound, this only leaves therefore a net duty on citric acid of 3¼ cents per pound, which is not sufficient to safeguard the American manufacturers against the European production.

In order to provide reasonable encouragement for the manufacturers of citric acid in the United States, we submit that the duty should be 1¾ cents per pound plus 33⅓ per cent ad valorem. Should, however, any change be made in the rate on citrate lime, either up or down, from the present duty of 1 cent per pound, then a corresponding change in rate on citric acid, up or down, should be made.

Paragraph 5, alkalies, alkaloids, etc., present duty 15 per cent ad valorem.

This paragraph applies to a large number of medicinal chemicals produced by many manufacturers, large and small, throughout the United States.

Medicinal chemicals are principally made in small quantities, meaning only a few pounds or ounces at a time. Their preparation has of necessity to be done by or under the immediate supervision of expert or experienced chemists, because purity of a high standard is most important. A large amount of capital is invested in the manufacture of medicinal chemicals, and a large number of skilled workmen and experienced chemists are employed. To give adequate protec-

tion to the American manufacturers, we think the duty should be 33⅓ per cent ad valorem.

Paragraph 616. Strychnia, or strychnine, and its combinations with acids not subject to duty under this section.

These products are now on the free list.

The crude materials for the manufacture of strychnia is nux vomica, also on the free list. Nux vomica contains a very small percentage of strychnine, the yield approximating an average of 1 per cent. The process of extracting strychnia from nux vomica is a very scientific operation and requires great care, involving high cost of labor and also high cost of solvents.

In order to have the industry prosper in the United States, strychnia and its salts should be removed from the free list and placed on the dutiable list at 33⅓ per cent ad valorem.

Nux vomica, the crude material for strychnia, should remain on the free list as at present.

Paragraph 38, potassium iodide. Present rate of duty 15 cents per pound.

Crude iodine is the crude material for the manufacture of potassium iodide. Crude iodine is on the free list (par. 515).

In order to properly protect the manufacturers in the United States against foreign competition, a duty of 33⅓ per cent ad valorem should be placed upon potassium iodide. This product contains over 75 per cent iodine.

Paragraph 515. Iodine, crude or resublimed. Now both on the free list.

In order to properly protect from foreign competition the manufacturers of iodine resublimed in the United States, this product should be removed from the free list and placed on the dutiable list at 33⅓ per cent ad valorem.

Crude iodine, which is the crude material for the manufacture of resublimed iodine, should remain on the free list.

The CHAIRMAN. Why do you recommend ad valorem duties instead of specific? That will give an opportunity for undervaluation and fraud, without any question. That is why I asked the question and made the remark. That is my opinion.

Mr. BLACK. Of course, the duty ad valorem appears to have been a better equalizer, or at least more of an equalizer, under general conditions.

The CHAIRMAN. Of course, as to articles related in value it is impossible to separate them. I agree with you then it is necessary; but wherever a specific duty can be applied, it would greatly aid the Government to have a specific duty instead of ad valorem; in my opinion.

Mr. GARNER. May I interrupt to ask you a question?

Mr. BLACK. Yes.

Mr. GARNER. You are giving us some general conclusions. It appears to me it is the duty of any gentleman appearing before this committee, that in addition to giving his conclusions as to what is necessary in order for an industry to maintain itself in this country that you ought to give the facts by which you arrive at those conclusions. Now, when you get through with your statement we have simply your conclusions. How you arrived at that opinion, or the facts from which the opinion was formed we have no knowledge of.

Mr. BLACK. No, sir.

Mr. GARNER. I submit that is not the only information that the committee would like to have; we would like to look at the facts and do a little reasoning ourselves with reference to what is necessary to maintain an industry in this country.

Mr. BLACK. Well, of course, we judge our opinion according to the conditions as they appear to us.

Mr. GARNER. Well, you do not give us those conditions as they appear to you. We would like to have a picture of them.

Mr. BLACK. If we are not properly protected on these products, why it will not be profitable for us to operate here.

Mr. GARNER. I still agree with your premise, but still I am after these facts to show if you are not properly protected.

Mr. BLACK. To provide suitable remuneration to the workman engaged in chemical factories we should have suitable protection and we consider these suggestions suitable protection.

Mr. GARNER. I know, but you give me some reasons; you say, considering the workmen; you do not give me the wages in this country and in England, or any other data from which you arrive at the conclusions as to what it costs to produce in the United States and in England. Those facts can be had so far as England is concerned as near as they can in this country.

Mr. BLACK. I have no definite figures as to wages in England and Germany, excepting what was already discussed this morning, indicating 75 cents a day.

Mr. GARNER. That brings us back to the original proposition of the difficulty this committee is going to labor under in framing a tariff bill at this time; it is impossible to ascertain the cost of production in foreign markets. I undertake to say that it is almost impossible at this time to tell what the cost of production will be in this country six months from now, and, of course, if we can not arrive at an accurate conclusion as to what the cost of production in this country will be six months from now it is impossible to arrive at a conclusion as to what it will cost to produce an article in Europe six months from now.

Mr. BLACK. It would be a very difficult thing to determine.

Mr. GARNER. I agree with you. I simply want to get you to that premise that you agree with the conclusion that it is a guess. Your guess may be as good as mine, and I submit that mine may be as good as yours.

Mr. TILSON. How long have you been engaged in this business?

Mr. BLACK. Since 1849.

Mr. TILSON. Then you have been through several different tariff acts?

Mr. BLACK. Yes, sir.

Mr. TILSON. Then could you not tell what the effect of certain duties were under certain acts, and then give your judgment what changes have since occurred or are about to occur, and your reason for it, that would make a difference at the present time? In other words, we would like to get some information from you as to what is going to be the effect on business in the immediate future; and, of course, we can only judge that from the facts in the case.

Mr. BLACK. Yes, sir. Well, it would be difficult to form an exact opinion as to which of the previous tariffs, of course, would be most advantageous.

The CHAIRMAN. Take the most recent one, the Payne tariff law.

Mr. BLACK. Yes; the Payne tariff would be a more suitable tariff, certainly, than the tariff of 1913.

The CHAIRMAN. Were they then protective to your industry?

Mr. BLACK. Yes, sir.

The CHAIRMAN. Sufficiently high?

Mr. BLACK. In some things. I am not prepared now to state on just what particular item or items it was more advantageous to us than on others.

Mr. TILSON. Have you any instances where the 1913 tariff act hindered the industry?

Mr. BLACK. Yes, sir; of course, the war conditions helped out somewhat. If the present tariff were to continue it would injure us most severely.

Mr. TILSON. Well, could you give some facts as to what occurred between the time when this tariff act went into effect and the time that the abnormal conditions arose on account of the war?

Mr. BLACK. I could not give any specific facts now; I haven't any specific facts before me. I am speaking more generally.

Mr. GARNER. Would a tariff equalling the difference between the cost of production in this country and abroad be satisfactory to you?

Mr. BLACK. No, sir.

Mr. GARNER. You are not willing then to have keen competition between you and the foreigners?

Mr. BLACK. No, sir.

Mr. GARNER. You want the exclusive market in this country?

Mr. BLACK. I would not say that.

Mr. GARNER. Well, if we give you a tariff rate that exceeds the difference in the cost of production here and abroad, how is the foreigner going to compete?

Mr. BLACK. I don't know; he has shipped goods——

Mr. GARNER (interposing). I submit you have answered the question correctly?

The CHAIRMAN. Mr. Black, we have given you a little more time than that allotted to you. I realize the questions have taken some of your time. If you care to file any briefs we will be glad to have you do so.

Mr. BLACK. I have a few other paragraphs left, and I will file briefs to cover these.

(The briefs filed by Mr. Black are as follows:)

NEW YORK, *December 31, 1920.*

DEAR SIR: Pursuant to your notice of tariff hearings, dated December 8, 1920, we beg to summit the following:

Paragraph 1. Tartaric acid: Present duty 3½ cents per pound.

This rate of duty has encouraged imports very greatly, to the detriment of the manufacturers in the United States. Imports in 1919 were about 728,000 pounds and up to the present time during the year 1920 about 1,770,000 pounds.

Crude argols is the raw material for the manufacture of this article.

The makers in the United States must pay duty on their crude material used while the Europeans have it directly at their doors free of any extra cost. Manufacturers in the United States must also pay from 50 to 100 per cent more for other raw materials used in the manufacture of tartaric acid, as well as everything that goes into construction of plant and operation of same. In and about our factory we employ labor in the form of carpenters, coppersmiths, tinsmiths, machinists, masons, and ordinary workmen, as well as high-priced chemists, clerks, etc., to all of whom we pay wages far in excess of anything paid in other countries.

The advantages possessed by the European makers over the manufacturers of tartaric acid in the United States in practically everything that goes to make up the cost of producing this article are not offset by a duty of 3½ cents per pound.

In order to properly protect the American manufacturer we submit that in addition to the present specific duty of 3½ cents per pound an additional duty of 25 per cent ad valorem be placed thereon.

Paragraph 8. Cream of tartar: Present duty 2½ cents per pound.

Crude argols is the raw material for the manufacture of this article. What we have said in relation to tartaric acid applies equally to cream of tartar.

The present duty of 2½ cents per pound is not adequate protection for the American manufacturer, and we submit that in addition to this specific rate an additional duty of 25 per cent ad valorem be placed thereon.

Paragraph 8. Rochelle salts or tartrate of soda and potassa: Present duty 2½ cents per pound.

The crude material for this article is also crude argols, and what we have said above in relation to tartaric acid and cream of tartar applies equally to rochelle salts.

The present duty of 2½ cents per pound is not sufficient protection for the American manufacturer, and we submit that in addition to this specific rate an additional duty of 25 per cent ad valorem be placed thereon.

Paragraph 8. Argols or crude tartar, or wine lees, crude: Present duty 5 per cent ad valorem.

About 95 per cent of all the consumption of crude argols in the United States is imported from European centers.

These articles are the crude material for the manufacture of cream of tartar, tartaric acid, and rochelle salts.

We will not ask for a reduction in duty on these crude materials, but should your committee think it wise to increase the duty thereon, then a corresponding increase in duty on cream of tartar, tartaric acid, and rochelle salts over those duties advocated above should be made.

Paragraph 19. Chloroform: Present duty 2 cents per pound.

The present duty of 2 cents per pound on chloroform is not sufficient to properly protect the manufacturers in the United States. We might mention that in the tariff of 1909 the duty was 10 cents per pound, in the tariff of 1897, 20 cents per pound, and in the tariff of 1894, 25 cents per pound, which tariffs more nearly reached the differential in cost between foreign make and that of the United States.

We submit that in order to provide adequate protection for the American manufacturers, the duty should be 33½ per cent ad valorem.

Paragraph 36. Camphor, refined and synthetic: Present duty 5 cents per pound.

It is evident from the fact that refined camphor is constantly being imported into the United States in increasing quantities, that the American refiners are not enabled to compete successfully with the foreign refiners, especially those of Japan, where all the costs of refining camphor are vastly lower than those of our own country. The imports of refined camphor into the United States in 1918 were about 621,000 pounds, and in 1919 about 931,000 pounds.

We submit, therefore, that if this industry is to be continued in the United States, the duty should be increased to 6 cents per pound.

Paragraph 36. Camphor, crude, natural: Present duty 1 cent per pound.

This is the raw material for the manufacture of refined camphor.

Supplies of the world of crude natural camphor are now practically under the control of a monopoly established by the Imperial Japanese Government. Crude natural camphor is not only the raw material for refined camphor, but also for other important products manufactured in the United States.

If the present duty of 1 cent per pound on crude camphor is to be maintained, then the duty on the refined article should be increased to 6 cents per pound as above referred to. If, however, for reasons of revenue it is deemed wise to increase the tariff upon the crude material, then a proportionate increase over the above-mentioned 6 cents per pound should be made in the tariff for the refined product, bearing in mind that 100 pounds of crude camphor represents in the finished refined product 85 to 87 pounds.

Paragraph 65. Salts and all other compounds and mixtures, of which bismuth, etc Present duty 10 per cent ad valorem.

We are interested only in that portion of this paragraph relating to bismuth preparations.

To properly protect the American manufacturers of bismuth preparations from foreign competition, we think they should be removed from the above paragraph and returned to paragraph 5, i. e., alkalies, alkaloids, etc., in which they were previously included, to which paragraph we have already made reference.

CHAS. PFIZER & CO. (INC.),
FRANKLIN BLACK, *Secretary.*

BRIEF OF MONSANTO CHEMICAL WORKS, ST. LOUIS, MO.

CAMPHOR, CHLORAL HYDRATE, AND CAFFEINE.

The Monsanto Chemical Works, of St. Louis, Mo., have been engaged in the manufacture of fine medicinal and other chemicals, including coal-tar chemicals, since 1900. The business of the plant has developed until there is an investment of several million dollars in plant and equipment, both in St. Louis, Mo., and in East St. Louis, Ill. The company has employed as many as 3,000 workmen, with a large technical and executive staff supervising the operation, and there is present in the business a very large investment in processes which are the result of laboratory and factory experiments conducted over a long period of years.

The company is largely interested in coal-tar derivatives, and was one of the first operations in the country to undertake the manufacture of coal-tar intermediates in 1915, when the European war and blockade halted the importation of European coal-tar intermediates.

While the coal-tar situation of the Monsanto Chemical Works is covered, to a certain extent, by the Longworth bill, attention is called at this time to the fact that two important products manufactured by the Monsanto Chemical Works, to wit, coumarin and synthetic oil of wintergreen, have been eliminated from the third group in the Longworth bill as it passed the House, and, as the bill now stands in the Senate, the Senate committee's elimination of these two items is considered by the Monsanto Chemical Works not only to destroy necessary protection to these two articles but to be inconsistent with the proper policy which should be adopted for a systematic protection of coal-tar products as a unit. The Monsanto Chemical Works therefore believe that coumarin and synthetic oil of wintergreen should be restored to the third group of the Longworth bill prior to its ultimate passage, or that in any general treatment of the coal-tar subject these two products in any tariff legislation other than the Longworth bill should be treated in the same manner as other coal-tar derivatives now in the third group of the Longworth bill would be treated.

The subject of this memorandum relates specifically to the three items named.

Camphor.—Under the act of 1913, camphor, crude, natural, pays 1 cent per pound, and camphor, refined and synthetic, pays 5 cents per pound. A great part of the camphor imported comes from Formosa, through Japanese control, and the Japanese domination of the natural product has placed the American market at the mercy of Japanese management. Some synthetic camphor is manufactured in the United States but does not reach market channels, as the production is in the hands of interests who consume in their own operations more camphor than they manufacture.

The Monsanto Chemical Works is now engaged in the erection of a large plant for the manufacture of synthetic camphor. There is a growing demand in the United States on account of the use of camphor in various manufacturing operations. The Japanese, through a practical government monopoly on the Formosa production, have been in the position to raise the price at will according to demands in the United States and other parts of the world, the price at one time reaching $3.50 per pound during the past two years. The Monsanto Chemical Works fear that the Japanese, facing a considerable domestic synthetic production in the United States, would so control the market as to attempt to make synthetic production unprofitable or impossible, and requests that an ad valorem duty of not less than 25 per cent be fixed for camphor, "natural and synthetic." The effect of this rate will be to enable domestic synthetic production to compete with Japanese natural camphor and to make competition certain, thus preventing very high prices through the Japanese monopoly. A revenue of several hundred thousand dollars would be derived from this source on natural camphor imported, and, at the same time, competitive conditions in the open market in the United States would keep the price reasonable.

Chloral hydrate.—Chloral hydrate carries a duty of 25 per cent ad valorem under paragraph 18 of the act of 1913. Prior to that time the rate was 55 cents per pound and under this prior rate the Monsanto Chemical Works engaged in the production and was able to break the price which the German producers had maintained of 90 cents per pound to less than 60 cents per pound. The Monsanto Chemical Works were able to remain in the business and thus reduce the cost to the American consumers under the 55 cents per pound rate. The 55-cent rate in the act of 1909 was under paragraph 16, chloral hydrate being a chemical compound in the preparation of which alcohol is used. The Germans evaded the 55 cents per pound rate by asserting that they used methyl alcohol in the production, and a considerable amount of their product was imported at 25 per cent ad valorem.

Under the 25 per cent rate of the act of 1913 for chloral hydrate specifically, the Germans exported large quantities of chloral hydrate. Since the act of 1913 became effective, they quoted chloral hydrate as low as 20 cents per pound, and, of course,

Monsanto's production ceased. The Monsanto Chemical Works dismantled their plant, and simultaneously with this dismantling the price of chloral hydrate began to mount and had approximately reached its former price at the time the European War occurred. The Monsanto Chemical Works resumed the manufacture after foreign importations were cut off and has continued the manufacture since. The Monsanto Chemical Works are now in a better position to manufacture chloral hydrate than in 1914, on account of increased supplies in this country of chlorine gas, which at that time was made by only one manufacturer at Niagara Falls, who had been urged to manufacture the gas in this country by the Monsanto Chemical Works but whose production was necessarily very expensive.

It is urged that a specific duty of 15 cents per pound on chloral hydrate will insure the Monsanto Chemical Works remaining in the production and prevent German monopoly of this product, as existed prior to 1909. Only a specific duty of at least 15 cents per pound will prevent Germany from flooding the market and suppressing all domestic production.

Caffeine.—Caffeine, under paragraph 13 of the act of 1913, is dutiable at $1 per pound. Under the same paragraph and pursuant to the provisions of the act of May 16, 1908, imported tea, tea waste, tea siftings or tea sweepings pay 1 cent per pound. Caffeine is manufactured from imported tea, tea waste, etc., imported under the last mentioned act, in bond, for manufacturing purposes. It requires 50 pounds of tea waste to manufacture 1 pound of caffeine, and, of course, all the tea waste is imported. The differential is therefore 50 cents per pound protection upon caffeine manufactured in the United States.

It is requested that one of two modifications of the rates in paragraph 13 of the act of 1913 be adopted: Either the duty on tea waste should be eliminated, or else the duty on caffeine should be increased to $1.50 per pound. The elimination of the duty on the tea waste would, of course, make a clear $1 per pound protection on finished caffeine. If the duty is left on tea waste, the increase to $1.50 per pound on caffeine will leave a clear $1 per pound protection on the finished product.

The necessity for an increase in the duty on caffeine is due to the fact that the Japanese are making caffeine in large quantities in Japan, and due to the fact that their tea waste raw materials are readily available in that country and they can accumulate supplies from other oriental producing countries at low freights and ship the finished product cheaply to the United States, in view of its comparatively small freight charge as against tea waste imported as a raw material into the United States for manufacture here. They can undersell American producers and put them out of business with only the 50 cents per pound protection on the finished caffeine.

The Monsanto Chemical Works consider it mandatory that there be a clear protection of at least $1 per pound on the finished caffeine, in order that its plant for the production of this article can continue in operation; and urge that in the revision of the tariff the caffeine and tea waste items be considered in the light thereof, and request that the rearrangement be so devised as to leave the clear protection of $1 per pound in favor of American production. Such caffeine as is imported, and it will continue to be imported, will thus pay a revenue and competitive conditions being preserved in the United States will prevent a Japanese monopoly from being created on this important article.

LEVI COOKE.

BRIEF OF THE ABBOTT LABORATORIES, MANUFACTURING PHARMACEUTICAL CHEMISTS, CHICAGO, ILL.

The Abbott Laboratories begs leave to submit the following data relative to the revision of the tariff on Schedule A, "Chemicals, oils, and paints." It is particularly interested in the finer medicinal chemicals, of which it is a manufacturer. The products to which we particularly wish to call your attention are:

1. Diethylbarbituric acid (American name, Barbital; trade-marked German name, Veronal) and its derivatives, such as Barbital sodium (also known as Veronal sodium and Medinal). Barbital is the most widely used hypnotic.

2. Para-amino-benzoyldiethyl-amino-ethanol hydrochloride (American name, not trade-marked, Procaine; German trade-marked name, Novocaine)—the local anesthetic most widely used by physicians and dentists.

3. Ethyl aminobenzoate (Anesthesin)—a local anesthetic.

4. Phenylcinchoninic acid (American name, not trade-marked, Cinchophen; German trade-marked name, Atophan) and its derivatives—the remedy most widely used by physicians for the treatment of gout, the gouty diathesis, and rheumatism.

5. Diamino-methyl-acridinium chloride (Acriflavine) and diamino-acridinium sulphate (Proflavine)—dyes devised by Ehrlich and widely used in England and on the continent as antiseptics and germicides.

6. We are also interested, as manufacturers, in colloidal silver preparations, in certain benzyl preparations, such as benzyl benzoate and other benzyl esters, in finer synthetic medicinal chemicals generally, and also in vegetable alkaloids and other active principles.

Of these preparations, diethylbarbituric acid (Barbital), para-amino-benzoyldiethyl-amino-ethanol hydrochloride (Procaine), and phenylcinchoninic acid (Atophan, or Cinchophen), are German patented preparations, made by us under license from the Federal Trade Commission. Adequate tariff protection on these is of great importance, in view of the fact that the patent under which we are operating for Barbital expires in February, 1922, for Procaine in February, 1923. The patent on Anesthesian has expired but the word is trade-marked and we are using this word under license from the Chemical Foundation. The flavines we are likewise manufacturing under license from the latter body.

The patent on Cinchophen (Atophan) is a process patent, and it is highly probable that it may be manufactured by other processes than the one under which we are operating, in which event the patent protection will of course be of no value. As a measure of protection to the American manufacturers of this product, the tariff laws should be broad enough to cover it.

We beg leave to suggest the following:

Raw materials.—We are in the main favorable to the provisions of H. R. 8078, introduced September 29, 1919, placing raw materials of the coal-tar type generally on the free list. We are not in position to express an opinion on all the preparations mentioned in this list, but as large users of certain coal and other crude tars and their distillates, we are in accord with the recommendations with regard to those items, to wit, that they should be nondutiable. As the United States is by all odds the largest producer of these items, placing these on the free list should work no serious injury to any American industry.

Coal-tar derivatives.—We believe the duty on the finer medicinal chemicals mentioned in this brief should be at least as high as on any other class of chemicals. Just how high this should be we do not undertake to say, but the protection should be adequate. We make this claim because the more difficult the synthesis of a chemical of this class, the greater the expense involved for research and the higher the labor cost. In fact, in all these the labor charge is the largest item of cost, because of their extreme complexity, the multiplicity of steps, and the relatively small production as compared with dyes and other chemicals used largely in industry.

For instance, reference to the "Census of Dyes and Coal-Tar Chemicals," by the Tariff Commission, discloses the fact that only 3,447 pounds of Procaine were manufactured in this country in 1919. In 1920 the production had increased, we believe, to over 6,000 pounds. In spite of the small amount as measured in pounds, this powerful anesthetic is produced in quantity adequate to meet the needs of the country. Of Cinchophen, we believe the Abbott Laboratories is the largest producer in the world. The quantity of the other medicinal preparations mentioned in this brief is relatively small as compared with other chemicals in wide general use, but large when the limited character of the market is considered.

Medicinal chemicals not of coal-tar origin.—Under the tariff now in force medicinals of coal-tar origin are subject to a duty of 30 per cent, while others not of coal-tar origin are subject to a duty of only 15 per cent. This distinction is unfair to synthetic preparations not of coal-tar origin, which should receive the same degree of protection as those of distinctly coal-tar origin.

An illustration of this disparity will be found in diethylbarbituric acid (Barbital). This is made synthetically from a number of chemicals, the most important being absolute alcohol and urea, the urea in turn being a nitrogen product synthesized electrolytically under conditions which are very favorable to manufacture in Germany. Such a duty is utterly inadequate to prevent flooding of the market with a foreign product. Furthermore, the patent expires in 1922, at which time, unless adequate protection is given, it will be impossible for American manufacturers to produce Barbital in this country in competition with German, Swiss, English, or other foreign producers. We therefore request that Barbital and other synthetic medicinal chemicals not of coal-tar origin be given the same degree of protection as synthetics of coal-tar origin.

Labor.—As already pointed out, the cost of production of finer chemicals is much less in European countries than in the United States. It has been stated that the prevailing rate of wages in Germany at the present time, with the current rate of exchange, averages about 55 cents per day. In the United States $5 a day for all

classes of labor involved may be considered as a minimum. The average in our own plant is considerably higher.

Competition.—All the items mentioned in this brief are competitive. There are three or more producers in the United States of every one, and each of these producers probably has facilities large enough to supply the entire requirements of this country and leave a balance for export.

Present prices compared with prewar prices.—Of the preparations mentioned in this brief, the prices generally are much lower than those asked by the German manufacturers and their agents in the United States before the war—this in spite of the fact that materials, labor, and everything entering into their composition are and have been much higher in America than they were in prewar days. For instance, during 1920 the cost of the raw materials and intermediates entering into the cost of Barbital, Procaine, and Cinchophen rose to points 100 to 400 per cent higher (so far as we are able to determine from data at our disposal) than for the same materials in Germany prior to the war. And yet, to take a concrete illustration, for some months we have been selling diethylbarbituric acid to pharmaceutical manufacturers at one-half the prices charged us by the agent of the German manufacturer in this country in prewar days. We have been and are now selling Procaine and Cinchophen in bulk quantities at prices commensurately lower than the prewar German prices.

Present European prices.—In spite of the decline in American prices since we began the manufacture of these substances and the relative low cost of these medicinals in America, the prices prevailing in Europe are so low at the present time as to preclude the possibility of competition unless adequate tariff protection is afforded. For instance, we have been quoted prices on some of these preparations in London, Basel, and Stockholm half or less what it will cost us to produce them in the United States. If the tariff bars are let down, it will be impossible for us to compete.

Trend of prices in the United States.—At present there is a distinct downward tendency in raw materials and intermediates of coal-tar products and similar synthetic medicinals. In some instances the prices for these necessary intermediates have fallen to one-half or one-third what they were some months ago. With these declines it will be possible to reduce considerably the cost of production of the medicinals referred to in this brief; but it should not be lost sight of that while these raw materials and intermediates are important as factors, the most important single element is labor: and even a drastic decline in the labor market would not even approximate the wages prevailing in European countries. Given adequate protection, however, the American industry should develop naturally, and in the near future the cost of these important medicinals should fall far below any heretofore experienced in this country.

Research.—May we call particular attention to the effect of fostering or discouraging the manufacture of synthetic chemicals upon chemical research in this country. In our own plant we are spending thousands of dollars annually on work of this kind, in searching for new medicinal preparations and in the improvement of processes of manufacture of the old ones. We have already devised several new chemicals which we believe will prove of the greatest importance to the medical profession.

In conducting research of this kind we have cooperated with and received the assistance of members of the faculties of several American universities: so that, in turn, our work has proved a stimulus to research in these institutions. If the manufacture of synthetics receives no encouragement, it must necessarily fail, and many lines of research, so auspiciously begun and so rapidly developed, will suffer a tremendous setback.

In conclusion we wish to call attention again to the fact that we began the manufacture of these synthetic medicinal preparations during the war, at the urgent suggestion of the Government's advisors. It was pointed out to us that these substances were vital for the relief of pain and suffering among not only our soldiers, but our civil population. We undertook their manufacture not with the expectation of large profits, but from a sense of public duty. As a matter of fact, not only were our profits not large, but, taking into consideration the investment necessary for the production of these chemicals, we actually supplied them at a loss, with the expectation, however, that the Government would provide in some way protection adequate to afford some promise of recouping ourselves through the development of this business—a business which we believe vital in any plan for preparedness against the contingencies of the future.

ALFRED S. BURDICK, M. D., *Vice President.*

BORIC ACID.

[Paragraph 1.]

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

The Italian Chamber of Commerce in New York is an association of American citizens and business men, incorporated under the laws of the State of New York, representing not only the commercial and industrial class of a community of nearly four million of their kinsmen in the United States of which over half million in the city of New York alone, but also the general interests of American firms having trade relations with Italy. This chamber is, therefore, interested in the promotion of commerce and mutual friendly relations between the United States and Italy, as well as in the production and trade of domestic articles and generally in the welfare and prosperity of both countries. It desires to submit to the consideration of your committee in respect to the various sections and schedules of the customs tariff its views and desiderata in connection with their revision, and earnestly hopes that they will receive the attention of your committee. This as Americans we expect, relying upon that spirit of cooperation between the duties of citizenship and the responsibility of legislators that should mark their mutual endeavors to protect and promote the best interests of this country, without forgetting our obligations to those, whose pressing needs for help and liberal treatment, enabling them to retrieve, in part at least, their fortunes sacrificed for a just and common cause, we should not be unmindful of on the morrow of battles fought together for the triumph of right and the mutual good. A solidarity of record this, which can not be entirely overlooked, even in such unsentimental work as the framing or revising of a tariff.

This chamber is not unaware of the great difficulties confronting legislators in a tariff revision, particularly now, under such a critical period as that of readjustment from war to peace conditions and after a conflagration of unprecedented magnitude, that has caused the greatest upheaval and strain ever recorded in the economic conditions of practically all nations of the world, and recovery from which can not be, at best, but slow and laborious, when the lawmakers intrusted with the serious task of hastening this recovery are met by an array of most perplexing problems and often left in a quandary of most arduous deliberation. Circumstances like these which, while counseling both conservativeness and prudence in their resolutions, seem at the same time to call more than ever for the sympathy and earnest cooperation of the public in the discharge of their responsible duties.

From the outset this chamber desires to record its conviction, which it confidently believes is shared by your honorable committee, that tariff revision should aim strictly at such purposes as come legitimately within the scope of the tariff, namely, first that of raising revenue by such sober and wise regulation of rates as will secure, with a minimum cost to the Government and the least inconvenience to trade, a satisfactory yield, taking above all good care that the source of revenue be not impaired, since an excessive increase of duty would void this purpose, and next that of offsetting the difference in the cost of production of an article between this and foreign countries. Furthermore, we believe that rather than considering an eventual revision of the tariff to make it serve the purpose of tiding the unavoidable deflation in the prices of commodities, due to the operation of the law of supply and demand in the process of economic readjustment from war to peace conditions, possibility should be afforded between this and foreign nations for entering into such reciprocal agreements regarding their respective commercial relations as would meet with their desires and interests and tend to promote and increase trade between the United States and foreign countries, and thus form an economic cooperation which experience has shown to be of mutual advantage.

BORACIC ACID, CRUDE AND REFINED BORAX.

Even under normal conditions the importation of boracic acid of 276 short tons in fiscal year 1914 was a mere trifle against the domestic output of boric products in this country, amounting in that year to 4,292 short tons of boracic acid and 26,501 tons of borax. This is still more true since the war, which has practically eliminated importations, with only 97 short tons to their credit in fiscal year 1918, and 140 and 127 short tons, respectively, in fiscal years 1919 and 1920. Domestic producers are absolute masters of the market, and, notwithstanding their location on the Pacific coast, will easily remain such in future, as transportation through the Panama Canal enables them to land east their output at no higher freights than the imported, while the lower

cost of fuel and materials gives them the advantage in an industry where labor has been replaced by machinery to a far greater extent in this country than abroad. There being absolutely no possibility of competition to American industry from the imported product in this line of commodity, this chamber respectfully recommends that the present rates of three-fourths of 1 cent per pound on boracic acid and of one-eighth of 1 cent per pound on refined borax and the exemption of duty for crude borax continue unchanged.

CITRIC ACID AND CITRATE OF LIME.

[Paragraphs 1 and 41.]

H. M. MAY, MANAGER EXCHANGE BY-PRODUCTS CO., CORONA, CALIF.

Mr. MAY. Members of the Ways and Means Committee, I am bringing to your attention this morning an industry never before discussed in the course of a tariff hearing, namely, the salvage of unsalable oranges, lemons, and grapefruit through the recovery from them of certain by-products.

From 3 to 30 per cent of each picking of citrus fruits is found unfitted for shipment and sale because of the size, character, or condition of the fruit. This holds true in both Florida and California, affects the orange, the lemon, and the grapefruit in almost equal measure, and constitutes a most distressing "leak" in the citrus industry.

Thus far the lemon growers of California have been most active in the manufacture of by-products from this waste fruit, but the orange and grapefruit growers, encouraged by the success of the lemon men, are undertaking or considering similar salvage operations. We would suggest, therefore, that our plea for protection upon lemon by-products be regarded as equally applicable to the by-products of the grapefruit and the orange, and particularly that oil of orange and oil of lemon, which have always appeared as a single item in tariff bills, be kept together in the bill now under consideration.

In the interest of the lemon industry of the United States we would respectfully ask an increase in the duties levied upon lemon by-products, suggesting the following revised scale:

Citric acid, Schedule A, paragraph 1, 15 cents per pound; citrate of lime, Schedule A, paragraph 41, 7 cents per pound; oil of lemon, Schedule A, paragraph 46, 30 per cent ad valorem.

The rates of duty now in force on these materials were established in 1913 without reference to the protection of American lemon growers, who had up to that time made no serious effort to salvage their unsalable fruit.

The Tariff Commission in discussing these three items remarks upon the rapid increase in domestic production. Statistical tables for 1920 will show a still more rapid gain. The total volume of "cull" fruit available, estimated by the commission in 1918 at 6,000 tons, exceeded 35,000 tons in the year just closed. By-products activities have not quite kept pace with the cull supply, but during the year over 30,000 tons have been successfully processed for citric acid, or citrate of lime, and about 10,000 tons for lemon oil.

The commission reports two-fifths of California's lemon acreage not yet in bearing, with much of the remainder still short of maximum yield, and predicts a doubled lemon production within five years, with a corresponding increase in the resulting volume of culls.

American by-products factories will then, with 50,000 to 60,000 tons of fruit available yearly, be in position to supply with ease more than half the probable needs of the American trade, namely, 2,500,000 pounds of citric acid and 300,000 pounds of lemon oil.

To-day Italian producers completely dominate the world traffic in these lemon derivatives, being backed by governmental support of a most extraordinary character, a State bureau having been created to fix prices and to insure immediate returns to the makers of by-products by a system of credits based upon warehouse receipts. This plan of official price control and the details of the organization of this absolute government monopoly are fully described by the Commission in Tariff Information Series No. 13, 1920, page 24.

When the war-time accumulation of citrate of lime is absorbed and the exchange rate once more approaches normal, much higher prices will, of course, be named unless an American product is offered in competition.

Citrate of lime has no value except for the manufacture of citric acid or of other citrates. Italy has had, until recently, no finishing or conversion plants of consequence, but, with large acid factories now operating and with others building, an intent to curtail exports of citrate of lime and to assume control of the citric-acid market is clearly shown. Protection of America's growing industry is the most logical means of insuring domestic citric-acid users an adequate supply at a moderate price.

Your attention is called to the large amount of other American-made material used in the processing of waste lemons. The recovery of each 100 pounds of citric acid involves the use of 90 pounds of sulphuric acid and 60 pounds of lime. Purifying chemicals, filter earths, and filter charcoal are freely used. Salt and sugar enter into the preserving of the peel. American railways are paid $50,000 per year for freight on lemons sent the factories.

Relative production costs here and in Italy bear vitally upon the tariff question. Authentic foreign data is difficult to secure. The records of the large Italian factories are jealously guarded, while many of the crude operations are carried on in the orchard districts themselves under conditions impossible to duplicate with American labor. Detailed cost sheets (season 1919–20) from the largest domestic factory, that of the Exchange By-Products Co., at Corona, Calif., are attached hereto. Roughly, these expense items group themselves as follows:

	Per ton
(*a*) Freight charges necessary to assemble the lemons at a central factory	$2.79
(*b*) Materials used in the process	4.05
(*c*) Labor	4.69
(*d*) Administration and plant maintenance	3.23
Total	14.76

In Italy item (*d*) may run as high, conceding to the Italian lira its normal worth of 19.3 cents, but on each of the three remaining items the foreign producer makes a material saving. Item (*a*) shrinks two-thirds because of the compact grouping of the Sicilian orchards and the fact that the preliminary operations, carried on at the point of shipment, greatly reduce the bulk to be transported. Item (*b*), material, drawn from Italian sources and paid for in Italian currency, is reduced at least one-third. On item (*c*)—labor—con-

trast must be made between the present Italian scale of 10 lire per day for unskilled labor or 15 lire per day for experienced men (Tariff Bulletin 13, p. 25), and the prevailing American wage of $4 and $5 per day paid workmen of comparable experience and skill. The saving to the Italian employer is 50.2 per cent with the lira at normal value, or 90.6 per cent if the lire is figured at its present worth of 3¾ cents.

Using in every case the more conservative figure, the foregoing statements still show Italian production costs to be at least 40 per cent beneath those of American factories of corresponding capacity.

In view of the handicap thus faced by American producers and considering the fact that a duty of from 5 to 10 cents per pound upon citric acid has been continuously maintained through the years when the American lemon grower was not affected, the change to the tariff of 15 cents per pound which we now request is essential to the protection of the rapidly growing domestic by-products industry, an industry which is becoming increasingly vital to the lemon grower.

An apparent discrepancy will be noted between the tariffs suggested for citric acid and for citrate of lime. Citric acid constitutes 64 per cent of the weight of standard citrate, but we have proposed a citrate rate only 47 per cent of that asked on acid in order that due consideration may be given those American citric acid manufacturers who depend upon citrate of lime procured abroad, and who must contend with inevitable process losses in converting the acid from the citrate to crystal form.

The United States Government, through the Department of Agriculture, has consistently fostered the lemon industry. The State of California, too, has given unfailing support. It is only in furtherance of this same policy of encouragement that the California lemon growers now ask to be protected in their by-products ventures.

Such ventures are not being made in the hope of material profit; they are intended chiefly to check the waste occasioned by enforced heavy culling. To illustrate concretely, a ton of cull lemons converted by the growers in their own factory into the logical by products, yields the following:

Citric acid, 40 pounds at a net manufacturing cost of	$14.76
Lemon oil, 6 pounds at a net manufacturing cost of	2.76
	17.52

The total sales value of these products at the highest prices recently quoted, namely: Citric acid, 55 cents per pound; lemon oil, 80 cents per pound, is $26.80, leaving but $9.28 for the grower in payment for the fruit so processed. This return, small as it is, is secured only as the result of an initial outlay of $160,000, the cost of the plant and its equipment. The privately owned establishments are required to withhold some portion of this net yield in compensation for their services, but they have at all times been most generous in their settlements with the growers and have, through their broad program of experimental work, contributed much to the development of the by-products industry.

A final quotation from the report of the tariff commission sums up the situation:

> The full recovery of the by-products will utilize a material formerly wasted and will strengthen the lemon industry without raising the price of lemons to the public.

Exchange By-Products Co. factory costs of citric acid, 1919–20.

	Amount.	Per ton of lemons processed.	Per pound of acid.
Labor:			
Direct manufacturing	$47,535.76	$3.20	
Laboratory	8,948.99	.60	
Repairs and alterations	5,810.66	.39	
Packing and shipping	2,735.10	.18	
Executive and clerical	4,732.60	.32	
	69,763.11	4.69	*Cents.* 11.7
Supplies:			
Filter-cel	5,421.23	.36	
Lime	6,222.38	.42	
Sulphuric acid	10,499.61	.70	
Filter cloth	3,827.17	.26	
Purifying chemicals	1,807.65	.12	
Fuel and water	19,652.47	1.33	
Laboratory	931.91	.06	
Packing and shipping	3,199.07	.22	
Repairs	6,273.51	.42	
For general plant use	2,316.55	.16	
	60,151.55	4.05	10.1
Overhead:			
Freight and drayage on lemons	41,511.40	2.79	
Light and power	4,078.70	.27	
Taxes, insurance, and interest	8,475.49	.57	
Office and sales expense	6,232.56	.42	
Miscellaneous maintenance costs	1,975.84	.13	
	62,273.98	4.18	10.5
General:			
Depreciation	18,000.00	1.21	
Interest on invested capital at 6 per cent	9,383.50	.63	
	27,383.50	1.84	4.6
	219,572.14	14.76	36.9

Weight of lemons processed, 14,874 tons; citric acid recovered, 595,000 pounds.

The value of the fruit itself is not considered in this statement of costs. No payments are made to the growers of the lemons until the by-products have all been sold, distribution then being made of whatever sum may remain in excess of the total cost of production, as set forth above.

H. M. BRIGHTMAN, PRESIDENT UNITED CHEMICAL WORKS (INC.), CORONA, CALIF.

Mr. BRIGHTMAN. Mr. Chairman and members of the committee, Mr. May has covered this situation so very thoroughly that I will not bother to touch on all the points, but simply go briefly over this paper, a copy of which has been left with your chairman:

We respectfully request your consideration of the citrate of lime and citric acid situation, having in mind the facts given in part 3 of Tariff Information, Series No. 13, the acids of paragraph 1 and related materials, citrate of lime, paragraph 41, provided for the in the tariff act of 1913.

First. We earnestly request that the tariff of 1 cent per pound placed on citrate of lime in 1913 be increased to 12 cents per pound, and that the tariff on citric acid be increased from 5 cents per pound to 20 cents per pound.

We recommend this increase from 1 cent per pound to 12 cents per pound on citrate of lime and the increase from 5 cents to 20 cents per pound on citric acid because the present tariff does not afford the necessary protection which the industry requires.

It fails to do so for following reasons:

1. Lower cost of raw materials abroad, ratio 2 to 5.
2. Lower labor costs abroad, ratio 1 to 2.
3. Lower transportation costs abroad, ratio 1 to 3.
4. Abnormal exchange rates, ratio 1 to 5.

The figures published by the Department of Commerce show that there has been a marked increase in the importations of both citrate of lime and citric acid since 1913. The figures of the Department of Commerce show that for the first 10 months of 1920 this country has been practically flooded with these commodities.

The average imports of citrate of lime for the eight years, 1912–1919, were approximately 5,060,000 pounds a year. For the first 10 months of 1920 these imports have reached 11,035,855 pounds.

The average imports of citric acid for the six years, 1909, 1914–1918 were 357,196. For 1919 they increased to 1,224,591, and for the first nine months of 1920, they have been 1,164,554, according to the Department of Commerce figures, while the Oil and Drug Reporter, an official organ of the chemical industry, record imports as over 3,000,000 pounds for 1920.

In making the request to increase the tariff from 1 cent to 12 cents per pound, on citrate of lime and from 5 cents to 20 cents per pound on citric acid we have in mind, of course, that through importations will our allies in the war be able to reduce their indebtedness to this country. At the same time, the American industry must live.

The facts given in Tariff Information, Series 13, indicate that the citric acid industry in Italy is controlled by the Government; that it has a world monopoly of this product and is, therefore, in a position to dictate prices which the American consumer will have to pay. From the facts given also in this report, your committee will note that the citric acid industry in California is practically a new industry. All of the plants, with the exception of one have been developed since 1915. Since 1913 there has been a tariff of 5 cents per pound on citric acid, but the amounts manufactured from lemons in the United States has been of a negligible quantity until the past two or three years. It has now come to the point where the California manufacturers have become a factor in this trade, and judging from the enormous increase in imports of both lime and citric acid, it gives every indication that this commodity is being dumped upon the American market with a view of killing this new industry which, up to the present time, has been encouraged by both the National Government and the State of California. During 1917 about 6,000 tons of lemons were consumed in California in the manufacture of citrate of lime. For the year 1920 the United Chemical Works alone processed 6,750 tons of cull lemons and other citric acid plants had processed, to our knowledge, no less than an additional 32,000 tons, which means a return to the grower of over $500,000 which otherwise would have been a waste.

Second, importance of industry.

In order that you may be familiar with the manufacture of citric acid and citrate of lime, and to show the relation of one to the other and its direct bearing on the lemon industry of California, I will give you a short analysis.

Citrate of lime is the principal product produced from the juice of lemons. Citric acid is produced from citrate of lime by further processes of purification.

The citrate of lime industry of the United States is practically in its infancy. Heretofore citrate of lime has been imported from foreign countries while cull lemons in the United States were a waste product.

There are over 45,000 acres planted to lemon trees in California, the monetary value of which is approximately as follows:

Land, 45,000 acres, at $300 per acre	$13,500,000
3,600,000 trees, at $1.25 each	4,500,000
Improvements on 45,000 acres at $1,000 per acre	45,000,000
Total investment in lemon industry	$63,000,000
Average per acre	$1,400
Investment in citrate of lime and citric acid industry (approximately)	1,500,000
Total invested in citric acid and its related industries	64,500,000

As a result of the conditions which have prevailed in the lemon industry in California, the lemon growers lost 30 per cent to 50 per cent of their crop. To save the farmer this loss the citrate of lime and citraic acid industries were started. We now find ourselves in the position, where, unless we receive this added protection, both this industry and the lemon industry can not live.

For the success of the lemon industry the citrate of lime and citric-acid industry must be protected.

The United Chemical Works plant was built in 1917.

The average price of citric acid was 65 cents during 1916.

The average price was 72 cents in 1917.

At the urgent request of a group of growers, who had no outlet for their cull lemons and basing its conclusion on the minimum market price of 65 cents for citric acid, the United Chemical Works saw its way clear to enter into the manufacture of citrate of lime and citric acid.

It is estimated that the consumption of citric acid in the United States is now about 4,500,000 pounds. The capacity of the United Chemical Works plant is 500,000 pounds a year. This, together with other plants in California, makes a productive capacity of citric acid from citrus fruits of approximately 1,500,000 pounds per year. The balance required for normal consumption is either imported or is manufactured in the East from citrate of lime imported.

Owing to the increase of the lemon crop, there were more cull lemons offered for sale to citric-acid plants during 1920 than the plants were able to handle. Therefore, a need for an increase in the capacity of the various plants. We represent in this matter about 500 lemon growers from whom we have purchased this year 6,750 tons of cull lemons which have heretofore been a waste product. This represents 525,000 pounds of citrate of lime or 337,500 pounds of citric acid, and on account of the condition of the market for citric acid we have had to refuse to purchase from lemon growers several thousand tons.

If we are given the needed protective tariff we will be able to take from the farmers their entire crop of cull lemons, and with this encouragement it is only a matter of a few years before California will be able to supply at least half of the requirements of the United States.

From the facts published in Tariff Information, Series No. 13, the fact is brought out that through the most complete utilization of the culls and through the growth of the lemon industry, there is a big future in the United States for the citric-acid industry.

In 1918 the percentage of nonbearing lemon groves in California was about 75 per cent of the acreage of bearing trees and much of the latter was in young orchards which had not reached the full bearing stage. Therefore, by 1923 or 1924, the lemon crop should be practically double that of 1918, and the quantity of culls to be manufactured into citric acid should show a corresponding increase.

Third, domestic production costs.

With the use of the most modern equipment, representing an investment of nearly a quarter of a million dollars, with every station working at its maximum efficiency, with labor costs reduced to $4 and $5 per man per day, our manufacturing costs this year have been between 41 cents and 42 cents per pound of citric acid. Our selling expenses averaged about 4 cents a pound; the freight rate east is $0.035 per pound, making our costs f. o. b. any Atlantic points 48 to 49 cents per pound. This does not include the cost of the cull lemons.

We have paid the growers as high as $24 per ton for his cull lemons when the market for citric acid justified it; but owing to the flooding of our market which has caused the price of citric acid to drop from 85 cents a pound in January to below 50 cents a pound, we can not continue to operate since this price for citric acid only takes care of our manufacturing expense without taking into account anything for the cull lemons.

Even when, as a matter of accommodation, we offered to pay $5 a ton, several large growers offered the fruit to us for nothing if we would pick and pay shipping expenses, for their costs, including short-haul freight, averaged between $12 and $15 a ton.

You will therefore see that if the Italians can ship citric acid to this country at 42 cents a pound, Atlantic ports, we must have at least this 12-cent tariff on citrate of lime and 20-cent tariff on citric acid.

The higher freight rate in the United States and lower boat rates to the United States has also worked against the California producer.

For details of comparison of costs we can refer to you no better authority than United States Tariff Commission's Information Series 13.

Fourth, imports.

Approximately 90 per cent of the imports of citrate of lime and citric acid come from Italy. The figures for the past years are as follows:

Imports of citrate of lime entered for consumption, taken from Department of Commerce reports.

	Pounds.	Amount.		Pounds.	Amount.
1912	5,196,122	$688,705	1917	6,075,724	$1,425,484
1913	3,301,106	500,461	1918	2,961,645	773,851
1914	4,358,752	726,252	1919	3,791,604	1,581,657
1915	6,301,337	1,113,389	1920 (first 10 months)	11,035,535	2,771,268
1916	8,542,880	1,982,823			

Citric acid imports.

	Pounds.	Amount.		Pounds.	Amount.
1909	243,010	$74,209	1917	157,528	$91,463
1914	651,739	304,155	1918	198,590	126,066
1915	722,434	447,131	1919	1,224,591	1,187,267
1916	171,877	107,603	1920 (first 9 months)	1,164,554	982,512

Citric acid production in United States, taken from United States Census reports.

	Pounds.	Amount.		Pounds.	Amount.
1904	2,265,631		1915	3,417,795	
1909	2,102,206	$777,235	1916	4,188,538	
1914	2,657,840	1,516,336	1917	4,032,897	

You will note from the above import figures that during the past year the American market seems to have been simply a dumping ground for the Italian product, a continuation of which means the killing of a practically new industry at a time when it is just about becoming a factor.

Mr. GARNER. Primarily, the lemon grower is the man interested in this suggestion of an increase in rate, is he not?

Mr. BRIGHTMAN. Yes, sir.

Mr. GARNER. If your industry ceases operation, of course he will have no place to sell his refuse lemons?

Mr. BRIGHTMAN. No, sir.

Mr. GARNER. Is your concern willing to take the difference in the cost of production in this country and in Italy as the basis for the tariff rate?

Mr. BRIGHTMAN. Please state that again.

Mr. GARNER. If the difference between the cost of production in this country and abroad could be ascertained, would you be willing to take that as the basis for the tariff rate?

Mr. BRIGHTMAN. That is just about what we ask for; yes, sir.

Mr. GARNER. That is your position, then? The difference between the cost of production here and abroad is all that you are asking for?

Mr. BRIGHTMAN. That is all.

Mr. GARNER. You do not ask for a prohibitory rate?

Mr. BRIGHTMAN. No, sir.

Mr. COLLIER. The gentleman from California who preceded you said that on citrate of lime 7 cents would be enough, and you want 12 cents. That is not the difference in the cost of production, then, as I understand you?

Mr. BRIGHTMAN. There is a little difference in the two plants. Mr. May's plant is a cooperative plant, which is operated by the growers. Our plant is a private industry. They make a return to the grower of the difference between the cost of manufacturing the citric acid and whatever they get for it. While the grower makes a profit there, and the plant makes no profit, our plant has to make a small profit.

Mr. COLLIER. His is a cooperative plant?

Mr. BRIGHTMAN. Yes, sir.

Mr. GREEN. You are at quite a disadvantage on account of the freight rates, most of your product being shipped east?

Mr. BRIGHTMAN. Yes, sir.

Mr. GREEN. And you have the possible effect of a slight added protection in the import duty levied by the Italian Government, but I do not suppose that would even compensate for the difference in freight?

Mr. BRIGHTMAN. No; the freight is very high.

Mr. COLLIER. Do you know the difference between the freight on your products to the Atlantic ports and the freight from Italy?

Mr. BRIGHTMAN. It is approximately one to three.

Mr. COLLIER. Which way?

Mr. BRIGHTMAN. We have to pay about three times as much freight as they do.

Mr. TREADWAY. Are you doing any business with Florida?

Mr. BRIGHTMAN. Do you mean selling there or taking their fruit?

Mr. TREADWAY. Getting their supply of cull lemons?

Mr. BRIGHTMAN. Their cull lemons there amount to nothing; their production is mostly grapefruit and oranges.

The CHAIRMAN. Do you have any competition with the Orient? Are there any lemons imported from the Orient?

Mr. BRIGHTMAN. Not in any great quantity; mostly from Italy and Sicily.

The CHAIRMAN. Are oranges imported from the Orient?

Mr. BRIGHTMAN. I could not answer that question.

The CHAIRMAN. There is a vast difference between your freight from California east and that paid on fruits of a similar character imported in the ports on the Pacific coast and then coming east. A much lower rate is given on imports than is given on the domestic fruit, do you know that?

Mr. BRIGHTMAN. I could not answer that question.

The CHAIRMAN. That is true. Have you finished, Mr. Brightman?

Mr. BRIGHTMAN. Yes, sir.

Mr. HADLEY. In answer to Mr. Garner's question, you stated that if the difference between the cost of production here and abroad could be ascertained, you would be willing to take a rate based on that difference. Did you figure that the freight was an element in the cost of production?

Mr. BRIGHTMAN. No; I did not. You will notice that I have handled the freight separately. Our cost of production was 41 and 42 cents. I gave you the selling price and the freight separately.

Mr. HADLEY. I wanted to be clear about that.

Mr. WATSON. Is it necessary to spray the trees in order to preserve them and have more perfect fruit?

Mr. BRIGHTMAN. Yes, sir; not only spray, but fumigate.

Mr. WATSON. I speak of it because 50 per cent of the apple trees in Pennsylvania have been destroyed by scale, and I do not know but what you might fear that the lemon trees would pass out of existence on account of the scale.

Mr. BRIGHTMAN. There is scale there. There is what they call the black scale in one locality, and then there is the ordinary scale.

Mr. WATSON. Does the scale destroy the trees, or have you overcome it?

Mr. BRIGHTMAN. The company I am affiliated with has a 200-acre ranch of citrus fruit and we spend from $5,000 to $10,000 a year in fumigating the trees and keeping this scale out. Some years it abounds more than in others.

Mr. WATSON. What percentage of your trees die on account of the scale?

Mr. BRIGHTMAN. We have not allowed them to die. We have been spending the money to kill the scale and keep them alive, but it would possibly destroy the tree.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

CITRIC ACID—CITRATE OF LIME.

Citrate of lime, the raw material from which citric acid is manufactured, bears a certain analogy of conditions to tartaric raw materials. Like the latter, it is an indispensable material to American manufacture, of which this country imported annually before the war between five and six million pounds and to a somewhat greater extent in the fiscal years 1915, 1916, and 1917 to make up for the lesser amount imported in 1914, when it had just been taken off the free list and placed for revenue purposes under a duty of 1 cent per pound. During the two fiscal years that followed our entry into the war importations were restricted owing to the unsettled conditions of shipping, so that receipts in fiscal year 1920 amounting to almost 10,500,000 pounds, made up for the deficiency of the two previous years.

While California has, since the war, started the industry of citrus by-products, its production is still of small importance in comparison to the large amount of citrate of lime needed by American manufacturers of citric acid. In 1919 the California production of this raw material was reported equal to about 232,000 pounds and that of citric acid to about 75,000 pounds, which means that California does not supply at the present time more than 5 per cent of the citrate of lime annually imported in the United States, and does not produce more than 2 per cent of the citric acid manufactured in this country.

Even allowing for such increase in the output of domestic citrate of lime as seems reasonable, in view of 75 per cent increase in acreage of now nonbearing lemon trees coming into production in the distant future, it is hardly to be expected that the output of citrate of lime in California would increase to any important percentage of the supply needed by American manufacturers of citric acid. The production which has increased from 2,102,256 pounds in 1916 to 4,032,897 in 1917, notwithstanding the lowering of the rate of duty from 7 to 5 cents per pound at the last tariff revision, which reduction, while it increased importations from a yearly average of 78,964 pounds during the period of fiscal years 1910–1913 to an average of 571,765 pounds since 1913, did not reduce the average annual importation of citrate of lime into this country. The latter increased, on the contrary, from a yearly average of 5,152,864 pounds in the period 1910–1913 to 5,867,000 pounds during the last seven fiscal years. This shows that the moderate lowering of the rate on citric acid has not worked to the prejudice of American manufacturers, while any loss to revenue ($10,435) has been amply offset by the gain from the 1 cent rate on citrate of lime ($58,670) assessed for revenue purpose.

The manufacture of citrate of lime in Sicily, from which is derived 95 per cent of our supply of this imported raw material, is an important feature of the lemon industry, of which it absorbs the culls, representing about 30 per cent of the lemon production. It had to be organized in a sort of cooperative form, to insure its existence from the ruinous depression that ruled formerly. During the war, which had a depressing effect on the exportation of the fruit, owing to unsettled shipping conditions it converted into citrate of lime the surplus cull production, which was somewhat greater than usual, but owing to the scarcity of labor, the shorter hours of work, at least the fivefold increase in wages, and the much higher cost of coal and other materials, the cost of manufacture has also augmented greatly, the price of citrate of lime, which in 1914 was 187.5 lire per quintal, having risen to 700 lire per quintal in 1919 and gone beyond the 1,000 lire in 1920.

Under the increased cost of this raw material and other disadvantages confronting manufacturers in this country, such as increased freights, increased cost of labor and of materials, etc., and considering that even for a good many years to come California will not be in a position to supply any appreciable amount of this article, we believe that no higher duty than the present rate of 1 cent per pound should be levied on citrate of lime, and such is the earnest and respectful recommendation of this chamber.

Citric acid is consumed principally in the manufacture of beverages and effervescent salts, also in some lines of technical use. After the spurt in imports, caused by the shipment in 1914 of amounts which had been held up previously in expectation of a tariff change and 1915 by war emergency requirements, especially since New York replaced London to a large extent for the reexportation of citric acid to

Central America, the West Indies, and the Far East, it was only with the abnormal conditions of exchange, which in this as in many other cases has influenced importations more than the tariff itself, that any chance of business has existed for imported citric acid, a condition which is only temporary and will disappear as soon as the exchange shall have dropped to a less abnormal level, an improvement which can not be too far distant.

It would be not only unwise, but also unfair, in the present unsettled and particularly hysteric condition of the exchange, when cost of production abroad as well as here can not always be reliably calculated, to base rates of duty, which are destined to become permanent, on criteria to offset the depreciated currency of the country of origin, as, upon return to more stable conditions, this would eliminate any further possibility of importation and give the manufacturers in this country a monopoly of a market which they are unable to supply.

If cost of production has increased in this country since the war, it has to a far greater extent augmented on the other side, where the economic changes brought about by the war have been felt even more acutely than here, in the cost of labor no less than in that of fuel and materials other than citrate of lime, in freights no less than in overhead expenses, without the favorable prospect for increased consumption of citric acid shown by this country since the advent of prohibition.

Under the present rapid readjustment to a prewar base of the price of citric acid, the 5-cent rate represents already a protection of over 10 per cent to the American manufacturer.

In consideration of the aforestated facts, showing that the present duty of 5 cents per pound on citric acid, while sufficiently protective for American manufacturers, is also the safest for the purposes of revenue and the interest of consumers, this chamber recommends respectfully that it be maintained unchanged.

BRIEF OF THE EXCHANGE BY-PRODUCTS CO., CORONA, CALIF., RELATING TO THE RECOVERY OF CITROUS BY-PRODUCTS.

In the interest of the lemon industry of the United States we would respectfully ask an increase in the duties levied upon lemon by-products, suggesting the following revised scale:

Citric acid	per pound	15
Citrate of lime	do	7
Oil of lemon	per cent ad valorem	30

The rates of duty now in force on these materials were established in 1913 without reference to the protection of American lemon growers, who had up to that time made no serious effort to salvage their unsalable fruit.

GROWTH OF BY-PRODUCTS INDUSTRY.

The Tariff Commission, in discussing these three items, remarks upon the rapid increase in domestic production. Statistical tables for 1920 will show a still more rapid gain. The total volume of "cull" fruit available, estimated by the commission in 1918 at 6,000 tons, exceeded 30,000 tons in the year just closed. By-products activities have not quite kept pace with the cull supply, but during the year over 25,000 tons have been successfully processed for citric acid or citrate of lime and about 10,000 tons for lemon oil.

The commission reports two-fifths of California's lemon acreage not yet in bearing, with much of the remainder still short of maximum yield, and predicts a doubled lemon production within five years, with a corresponding increase in the resulting volume of culls.

American by-products factories will then, with 50,000 to 60,000 tons of fruit available yearly, be in position to supply with ease more than half the probable needs of the American trade, namely, 2,500,000 pounds of citric acid and 300,000 pounds of lemon oil.

ITALIAN CONTROL OF PRESENT SITUATION.

To-day Italian producers completely dominate the world traffic in these lemon derivatives, being backed by governmental support of a most extraordinary character, a State bureau having been created to fix prices and to insure immediate returns to the makers of by-products by a system of credits based upon warehouse receipts. This plan of official price control and the details of the organization of this absolute Government monopoly are fully described by the commission in Tariff Information Series No. 13, 1920, page 24.

When the war-time accumulation of citrate of lime is absorbed and the exchange rate once more approaches normal, much higher prices will, of course, be named unless an American product is offered in competition.

Citrate of lime has no value except for the manufacture of citric acid or of other citrates. Italy has had, until recently, no finishing or conversion plants of consequence, but, with large acid factories now operating and with others building, an intent to curtail exports of citrate of lime and to assume control of the citric-acid market is clearly shown. Protection of America's growing industry is the most logical means of insuring domestic citric-acid users an adequate supply at a moderate price.

OTHER INTERESTS AFFECTED.

Your attention is called to the large amount of other American-made material used in the processing of waste lemons. The recovery of each 100 pounds of citric acid involves the use of 90 pounds of sulphuric acid and 60 pounds of lime. Purifying chemicals, filter earths, and filter charcoal are freely used. Salt and sugar enter into the preserving of the peel. American railways are paid $50,000 per year for freight on lemons sent the factories.

COST OF MANUFACTURE, DOMESTIC AND FOREIGN.

Relative production costs here and in Italy bear vitally upon the tariff question. Authentic foreign data is difficult to secure. The records of the large Italian factories are jealously guarded, while many of the crude operations are carried on in the orchard districts themselves under conditions impossible to duplicate with American labor. Detailed cost sheets (season 1919–20) from the largest domestic factory, that of the Exchange By-Products Co., at Corona, Calif., are attached hereto. Roughly, these expense items group themselves as follows:

[Per ton of lemons handled.]

(*a*) Freight charges necessary to assemble the lemons at a central factory	$2.79
(*b*) Materials used in the process	4.05
(*c*) Labor	4.69
(*d*) Administration and plant maintenance	3.23
Total	14.76

In Italy item (*d*) may run as high, conceding to the Italian lira its normal worth of 19.3 cents, but on each of the three remaining items the foreign producer makes a material saving. Item (*a*) shrinks two-thirds because of the compact grouping of the Sicilian orchards and the fact that the preliminary operations, carried on at the point of shipment, greatly reduce the bulk to be transported. Item (*b*), material, drawn from Italian sources and paid for in Italian currency, is reduced at least one-third. On item (*c*), labor, contrast must be made between the present Italian scale of 10 lire per day for unskilled labor or 15 lire per day for experienced men (Tariff Bulletin 13, p. 25) and the prevailing American wage of $4 and $5 per day paid workmen of comparable experience and skill. The saving to the Italian employer is 50.2 per cent with the lira at normal value, or 90.6 per cent if the lira is figured at its present worth of 3¾ cents.

Using in every case the more conservative figure the foregoing statements still show Italian production costs to be at least 40 per cent beneath those of American factories of corresponding capacity.

In view of the handicap thus faced by American producers and considering the fact that a duty of from 5 to 10 cents per pound upon citric acid has been continuously maintained through the years when the American lemon grower was not affected, the change to the tariff of 15 cents per pound which we now request is essential to the protection of the rapidly growing domestic by-products industry, an industry which is becoming increasingly vital to the lemon grower.

An apparent discrepancy will be noted between the tariffs suggested for citric acid and for citrate of lime. Citric acid constitutes 64 per cent of the weight of standard citrate, but we have proposed a citrate rate only 47 per cent of that asked on acid in order that due consideration may be given those American citric acid manufacturers who depend upon citrate of lime procured abroad and who must contend with inevitable process losses in converting the acid from the citrate to crystal form.

AID FROM STATE AND NATION.

The United States Government, through the Department of Agriculture, has consistently fostered the lemon industry. The State of California, too, has given unfailing support. It is only in furtherance of this same policy of encouragement that the California lemon growers now ask to be protected in their by-products ventures.

Such ventures are not being made in the hope of material profit; they are intended chiefly to check the waste occasioned by enforced heavy culling. To illustrate concretely, a ton of cull lemons converted by the growers in their own factory into the logical by-products, yields the following:

Citric acid, 40 pounds, at a net manufacturing cost of	$14.76
Lemon oil, 6 pounds, at a net manufacturing cost of	2.76
Total	17.52

The total sales value of these products at the highest prices recently quoted, namely, citric acid, 55 cents per pound; lemon oil, 80 cents per pound; is $26.80, leaving but $9.28 for the grower in payment for the fruit so processed. This return, small as it is, is secured only as the result of an initial outlay of $160,000, the cost of the plant and its equipment. The privately owned establishments are required to withhold some portion of this net yield in compensation for their services, but they have at all times been most generous in their settlements with the growers and have, through their broad program of experimental work, contributed much to the development of the by-products industry.

A final quotation from the report of the Tariff Commission sums up the situation: "The full recovery of the by-products will utilize a material formerly wasted and will strengthen the lemon industry without raising the price of lemons to the public."

Exchange By-Products Co. factory costs of citric acid, 1919–20.

	Cost.	Per ton of lemons processed.	Per pound of acid.
			Cents.
Labor:			
Direct manufacturing	$47,535.76	$3.20	
Laboratory	8,948.99	.60	
Repairs and alterations	5,810.66	.39	
Packing and shipping	2,735.10	.18	
Executive and clerical	4,732.60	.32	
Total	69,763.11	4.69	11.7
Supplies:			
Filter-cel	5,421.23	.36	
Lime	6,222.38	.42	
Sulphuric acid	10,499.61	.70	
Filter cloth	3,827.17	.26	
Purifying chemicals	1,807.65	.12	
Fuel and water	19,652.47	1.33	
Laboratory	931.91	.06	
Packing and shipping	3,199.07	.22	
Repairs	6,273.51	.42	
For general plant use	2,316.55	.16	
Total	60,151.55	4.05	10.1
Overhead:			
Freight and drayage on lemons	41,511.40	2.79	
Light and power	4,078.70	.27	
Taxes, insurance, and interest	8,475.49	.57	
Office and sales expense	6,232.55	.42	
Miscellaneous maintenance costs	1,975.84	.13	
Total	62,273.98	4.18	10.5
General:			
Depreciation	18,000.00	1.21	
Interest on invested capital, at 6 per cent	9,383.50	.63	
Total	27,383.50	1.84	4.6
Grand total	219,572.14	14.76	36.9

Weight of lemons processed	tons	14,874
Citric acid recovered	pounds	595,000

The value of the fruit itself is not considered in this statement of costs. No payments are made to the growers of the lemons until the by-products have all been sold, distribution then being made of whatever sum may remain in excess of the total cost of production as set forth above.

FORMIC ACID AND FORMATE OF SODA.

[Paragraph 1.]

BRIEF OF VICTOR CHEMICAL WORKS, CHICAGO, ILL.

FORMIC ACID.

Formic acid now appears in paragraph 1 of Schedule A of the dutiable list of the present law, which levies a duty of 1½ cents per pound. It is recommended that this rate be increased to 7½ cents per pound, for the reason that the cost of labor in this country is more than 7½ cents per pound for formic acid greater than it is in Germany, the principal foreign producer.

The consumption of formic acid in this country is estimated at about 1,500,000 pounds per year.

Formic acid is used in the dyeing of cotton and wool mixtures and is superior to sulphuric acid for this purpose because it is less injurious to the fabric than sulphuric acid. It is also used in the textile mills, in tanneries, and its nickel salt finds extensive employment in the hydrogenation of oils.

Formic acid is already a product of great importance to many manufacturers in this country and the business is capable of further great development of the industry within the United States. Prior to the war there was but one American manufacturer producing formic acid. This was the Merrimac Chemical Co., of Boston, Mass. Because of foreign competition the business, however, proved unprofitable, and the manufacture was discontinued. Since the war several concerns began the manufacture of formic acid, but only one company, the Rosebrugh Chemical Co., of Syracuse, N. Y., developed its manufacture on a large scale, and for a year or two produced the product in a large way for the market. After the armistice had been declared and importations of formic acid were resumed, this company found itself unable to compete and was compelled to discontinue operations. It is understood that their factory has been dismantled and that they have permanently withdrawn from the business.

The Victor Chemical Works being large producers of sodium formate, as an intermediate product in its manufacture of oxalic acid, took up the manufacture of formic acid from sodium formate about six months ago, and they have been regularly offering formic acid on the market since that time.

If the domestic manufacturers of formic acid are afforded the reasonable and adequate protection of a duty of 7½ cents per pound, the industry can be continued in this country, the present manufacturing facilities being ample to supply the domestic requirements.

The production of one and a half million pounds of formic acid requires about 125 men in direct manufacture. To this should be added about 40 more men who are employed in the production of raw materials used in the manufacture of formic acid. So that the number of individuals who find employment in the formic acid industry and because of it may be conservatively stated as 165 men.

The actual cost of producing a pound of formic acid during the four months ending October 31, 1920, taken from the books of the company, show a manufacturing cost of 18 cents per pound of formic acid. This cost is made up as follows:

	Cents.
Labor	7.84
Raw materials	7.85
All other expenses, including power, factory operation, depreciation (not interest, nor overhead, nor selling expense)	2.31
Total	18.00

According to the United States Tariff Commission 85.7 per cent of all the formic acid imported into this country in prewar years came from Germany. According to the latest information, the German workman receives the equivalent of 54 cents as his daily wage. Our lowest daily wage for common labor at this writing is $5 per day, so that as shown above we pay 7.84 cents for labor per pound of formic acid, while the German manufacturer would only have to pay 0.86 cent per pound of formic acid. In other words, the labor cost entering directly into the production of formic acid is 7 cents per pound greater in this country than it is in Germany at the present day. Nor does this tell the whole story. The same difference in labor costs which applies to the labor employed in the direct manufacture of formic acid also applies in favor of the German manufacturer in the labor used for the production of the required raw materials.

As will be noted, we use per pound of formic acid raw materials to the value of 7.85 cents and it is safe to figure that at least one-fourth of this raw material cost is represented by labor, or almost 2 cents per pound. This labor the German obtains for 0.2 cent per pound; so that the labor required in the production of raw materials used in a pound of formic acid costs in this country 1.8 cents per pound more than in Germany.

Summarizing these facts, they show that the American manufacturer is paying, for labor only, 8.75 cents more per pound of formic acid than his German competitor.

Since labor is also an important element in the cost of plant equipment, transportation and other items of indirect manufacturing costs, it will be appreciated that the advantage of 8.75 cents per pound of formic acid which the German manufacturer enjoys over the American manufacturer by no means expresses the full advantage.

At the present time, formic acid is sold at around 15 cents per pound, which is 3 cents per pound below our actual cost of manufacture. For the time being, therefore, our factory has been compelled to close down.

A duty of 7½ cents per pound will by no means exclude importations, because, as shown above, the advantage which the foreign manufacturer has by saving in the cost of labor more than offsets this duty of 7½ cents per pound. The laying of such a duty, however, would encourage the American manufacturer to build up the business, and while they always will be subject to foreign competition, even under such a duty, they would be better able to meet this competition.

The present rate of duty of 1½ cents per pound affords only one-third of the protection now that it did in 1913 when it was enacted, and it was inadequate then.

The United States Tariff Commission in Tariff Information Series No. 13 gives the declared value of formic acid during the years 1912, 1913, 1914, and 1915 at less than 5 cents per pound, so that a duty of 1½ cents at that time was equivalent to an ad valorem duty of more than 30 per cent. To-day our actual cost of manufacture is approximately 18 cents per pound, and the lowest price at which the material has been dumped by foreign manufacturers during the recent months on the American market has been 15 cents per pound, and the duty paid thereon of 1½ cents per pound, therefore, now represents an ad valorem duty of only 10 per cent instead of 30 per cent, the duty fixed by the act of 1913.

It will be conceded that it is essential that this country have within its borders a dependable production of formic acid, so that it will not be necessary for American manufacturers and industries to rely entirely upon foreign sources of supply. The imposition of 7½ cents per pound on formic acid will make possible the continuance of the industry here. While, on the other hand, a duty which is not sufficient to equalize the labor cost between this country and abroad will result in the American market going to the foreign manufacturers, the destruction of a large capital investment in this country, and of the remunerative employment of American workmen.

FORMATE OF SODA.

Formate of soda is not specifically mentioned in the tariff act of 1913, but it carries a duty of 15 per cent ad valorem under paragraph 5 of the act.

It is recommended that a specific duty of 4 cents per pound be levied to equalize the difference in the cost of labor and to relieve the American manufacturer of oxalic acid and formic acid of dependence for his initial raw material on foreign countries.

Formate of soda is manufactured from caustic soda and carbon monoxide gas and its principal if not its sole use is that of forming the intermediate product from which oxalic acid and formic acid are manufactured.

During the fiscal year 1914 about 2,000,000 pounds of formate of soda were imported into this country, all of which came from Germany. Since 1916, the Victor Chemical Works has been producing formate of soda on a large scale and it has now a manufacturing capacity of approximately 8,000,000 pounds per year. All of the formate of soda heretofore produced by this company has been used by it in the manufacture of oxalic acid and formic acid.

If this country is to produce oxalic acid and formic acid, it is essential that the domestic manufacturers produce their own formate of soda. Unless they do so, the American oxalic acid and formic acid industry would be dependent on a material of foreign manufacture, notwithstanding the fact that the basic raw materials, caustic soda and coke, are available in ample supply in the United States.

For this reason, the United States Tariff Commission, in Tariff Information Series No. 13, suggested the placing of a relatively high duty on formate of soda. In practice it requires 2.1 pounds of formate of soda to produce 1 pound of oxalic acid and about 1.65 pounds of formate of soda to produce 1 pound of formic acid. In our

statement before this committee in reference to oxalic acid and formic acid we have recommended a duty of 10 cents per pound on oxalic acid and 7½ cents per pound on formic acid, and the reasons advanced in these statements for such duties apply with full force to formate of soda. There is this difference, however, that this country's interests would be best served if the duty on formate of soda were placed even higher than we recommended, so as to prohibit importation entirely; thus compelling the manufacturers of oxalic acid and formic acid in this country to produce themselves the formate of soda from the basic raw materials available here and not have this industry dependent for its initial raw material on a product manufactured abroad.

AUGUST KOCHS, *President.*

TANNIC ACID.

[Paragraph 1.]

F. G. ZINSSER, OF ZINSSER & CO., HASTINGS ON HUDSON, N. Y.

Mr. ZINSSER. Mr. Chairman, I am put down here to speak on hydroquinone. That is a mistake. It comes under the coal-tar products. I have nothing to add to what some of the gentlemen said here about tannic acid and its derivatives, except that I would like to call attention to the fact that the question has not been brought out sufficiently strong that the classification on nutgall extracts should be changed. They are now in the list at three-eighths of a cent a pound. They are nothing really but pure tannic acid desiccated in water, and they can be very easily designated and sold as pure tannic acid.

The gentlemen who have spoken before me are chiefly producers of the United States Pharmacopœia article and not of the technical. This technical tannic acid is now brought in from China as nutgall extract, and unless that classification is changed we shall either have to fight each importation or stop the manufacture of the technical product here.

I have handed in a brief on this subject, and with your permission I would like to change it, as I put in ad valorem duties, and according to your wish I would prefer to put in the straight duties. If you will permit me to do so, I shall take these briefs home with me and submit others.

Mr. GARNER. Won't you be good enough to submit both duties, since you have originally prepared your brief on ad valorem duties and now wish to substitute specific duties? Won't you be good enough to file your brief as you had originally prepared it, and then make the substitution of the specific duties?

Mr. ZINSSER. We have done that.

There is one more thing I would like to say for your consideration. The statement was made here that European chemists are very much superior to the American chemists, and I, as one of the fraternity, wish to object to that very seriously. I think we have proven our worth during the war, and we can hire better American chemists than we can European chemists, whom we can have at half the price, but we do not believe they are worth what we pay them at half the price.

BRIEF OF ZINSSER & CO., HASTINGS-UPON-HUDSON, N. Y.

The following facts referring to Schedule A, paragraph 1, are respectfully submitted for your consideration:

Change of duty on tannic acid from 5 cents to 20 cents, or, if ad valorem, 30 per cent.

Change of duty on gallic acid from 6 cents to 25 cents, or, if ad valorem, 30 per cent.

Change of duty on pyrogallic acid from 12 cents to 40 cents, or, if ad valorem, 30 per cent.

We recommend these changes to prevent the flooding of the market with foreign manufactures.

The tannic-acid industry is of long standing. The undersigned have manufactured this product for 28 years. The duty was then 50 cents per pound and was gradually reduced until the Underwood tariff imposed a duty of only 5 cents per pound. During the few months this tariff was in operation before the outbreak of the war, offers of these commodities were made by German firms far below the market price and in many cases below our cost of manufacture. We quote verbatim from one letter, certified copy of which is in possession of the Tariff Board, where a manufacturer anxious to establish an agency writes as follows: "These duties shall now be not only diminished but practically abolished." This proves conclusively that the present duties are inadequate. The manufacture of these products has become more important, due to the fact that gallo-tannin and its derivatives form the basis of a large number of valuable dyes which are now made in this country, and the further development and permanent establishment of these fast colors will make the United States independent of foreign goods. Tannic acid, under the name of powdered or dry nutgall extract, has for the last few years been brought in from China at prices very little above the cost of raw materials to us.

Gallic acid is the main ingredient of gallocyanine, a blue color very extensively used for the dyeing of navy blues during the war and almost the only blue color available at that time. Gallic and pyrogallic acids are used for the manufacture of coeruleine, a fast green dye, alizarine brown, gallamine blue, delphine blue, celestine blue, and many other similar dyestuffs.

Two hundred and fifty men and twenty graduate chemists are employed by us in the production of these products and the development of their derivatives.

The duties asked for are, to our best knowledge, equivalent to differences in cost of production, comprising wages, scientific superintendence, higher cost of equipment, and larger invested capital in the United States as compared with that of European countries where similar products are manufactured. The fluctuation of foreign exchange and incomplete knowledge of existing conditions makes it impossible to give detailed and exact account of these differences.

We would call your attention also to an error in classification of nutgall and sumac extracts, Schedule A, paragraph 30. These are classified as tanning materials. Neither are used for tanning, and gall extract can not be used for that purpose. Gall extract is a solution of tannic acid in water and carries a duty of three-eighths cent per pound, which practically wipes out the duty on tannic acid, as it is a very simple matter to evaporate the water and convert the gall extract into a high-class tannic acid. The duty should be the same as that on tannic acid, based on the percentage of tannin contained in the varying strengths of the extracts.

F. G. ZINSSER, *President.*

OXALIC ACID.

[Paragraph 1.]

AUGUST KOCHS, OF THE VICTOR CHEMICAL WORKS, CHICAGO, ILL.

Mr. KOCHS. Gentlemen, we were established in 1902, but the commodity we are especially interested in is oxalic acid, which we first took up in 1914.

Our factory began production in about 1916. Our present investment in the oxalic plant is about $600,000. We employ at the present time about 200 men in that plant. Oxalic acid is a very important product. It is used in laundries very extensively, in the manufacture of dyes, especially in malachite green, which is a color now being made in this country, also in textile work, bleaching, and tanning.

The consumption of oxalic acid prior to the war was about 10,000,000 pounds per year. Of this, about 8,000,000 pounds were imported; practically all of that from Germany. The balance, or about 20

per cent of the domestic consumption, was produced by one concern in Bradford, Pa., the American Alkali & Acid Co. They have been in business for a great number of years. They failed once and were then reorganized. According to the record of various hearings before the committees of Congress, they have lost money every year, for the reason that their cost of production was greater than the market price made by the importers in this country.

Our own costs to-day on oxalic acid, as figured for the last three months, ending October 31, when we shut down, were 24¼ cents per pound.

The CHAIRMAN. Before the war that sold at what price?

Mr. KOCHS. Before the war that sold at around 7 cents—7 or 8 cents a pound. Its declared value, however, was given as 5 cents, for customs purposes. Of course, during the war very little—practically none—of this product came in. However, during the last six months importations have been resumed on a larger scale and foreign oxalic acid is selling at around 15 cents a pound in the American market now, which is 10 cents below our cost of production. As a consequence, we are not producing any.

I might say that at the same time that this material was selling in this country at 15 cents a pound it was being quoted in England and Germany at prices ranging from 25 cents to 30 cents per pound, and I believe that that is the price abroad to-day. I am referring now to quotations of about a month ago.

Mr. LONGWORTH. You mean they are dumping it here?

Mr. KOCHS. They are dumping it into this country.

Mr. COPLEY. What would be their object of dumping it into this country at 15 cents?

Mr. KOCHS. To discourage the manufacture in America.

Mr. COPLEY. I mean how would they consent to a loss of 10 cents on the sale in order to discourage the American manufacturer?

Mr. KOCHS. That is what they do.

I want to say this, that our labor cost per pound of oxalic acid is 10.8 cents.

Mr. COPLEY. I am not questioning that fact, but you say it sells over there for 25 cents, and they are dumping it here at 15 cents. The question is, What causes that to be done?

Mr. KOCHS. They are making a profit on the material on the other side and selling it here below cost or at cost for the present time.

Mr. COPLEY. For what purpose?

Mr. KOCHS. For the purpose of getting rid of their surplus and of discouraging the manufacture of oxalic acid in this country.

Mr. HAWLEY. Do you know that that 15 cents a pound is their cost? It might be less than 15 cents.

Mr. KOCHS. It might be; yes, sir.

If I might be permitted, I will just tell you where they have a big advantage over us. Our labor cost, direct labor cost, is 10.8 cents per pound, or almost 11 cents. That means the actual factory labor in producing oxalic acid from the raw materials which we use and which are caustic soda, lime, sulphuric acid, and coke.

Mr. LONGWORTH. In other words, about 50 per cent of your cost is labor. Of your actual cost about 50 per cent is labor?

Mr. KOCHS. Almost; yes. It is fully 50 per cent, if you figure the labor which enters into the raw materials. Our raw material

cost is 11.54 cents, and I have estimated that one-fourth of that is labor cost. Some of you gentlemen of the committee know more about the cost of coke and coal than I do, and I do not think I am far off when I say that a quarter of that is labor.

The CHAIRMAN. Will you permit me to make a brief statement for the benefit of the gentlemen on the committee who have not become familiar with the statement made by the Alien Property Custodian, Mr. Palmer, in January, two years ago, in his report, beginning on page 25, where he points out that some time before the war I think two or possibly three factories started up in this country with American capital, making oxalic acid and some other chemicals? There were two establishments in the country making that same material. The price of the article was 7 cents a pound, as I now remember. When the new institutions got into operation, the old factories cut the price down to 4.4 cents a pound, and then to 2.2 cents a pound, and the three new factories had to go into bankruptcy.

One gentleman appeared before our committee and testified that he was obliged to buy his own plant in at a sheriff's sale. They closed, and the war came on, and there was such a scarcity of the article, and such a demand for it, that those factories started up again and became prosperous, and then his attention was called to the fact that the two factories that brought about the war on prices might be controlled by foreign capital, and upon investigation he found that they were owned by German capital and were branch institutions of the parent company in Germany, and took them over under the war measure which authorized him to do so, and sold them to American capital. But I am ahead of my story. When the three factories closed down those two remaining factories put the price back to 9 cents a pound, above where it sold before the three new factories were built. The point is that the Germans were guilty of unfair competition, in selling below cost to destroy American competition. That is your idea now?

Mr. KOCHS. Yes. Of course I am not familiar with what happened in those days.

The CHAIRMAN. That is in his report, and he has made a very excellent detailed statement on that.

Mr. KOCHS. Yes. I have not read that report.

There has been a great deal of discussion this morning about the cost of labor in Germany. There are some statistics on that available right here in the Department of Labor. We have figures that the cost of labor in Germany, of common labor, was 40 marks, in our brief. I find it is a little less than that. I find it varies. Here is the report of the Department of Labor, Bureau of Labor Statistics, of November, of the Labor Review, which gives a cost for the first quarter of 1920 ranging from 30 marks to 39 marks.

Mr. LONGWORTH. That is about 60 cents in our money?

Mr. KOCHS. Fifty-four cents. That is what we figure the cost.

Now, gentlemen, as I have said, it is therefore 11 per cent of our labor cost, the cost of labor which enters into our product, which is 13.7 cents per pound.

Mr. HULL. What are your labor costs per day?

Mr. KOCHS. We are paying $5 for a 10-hour day.

Mr. LONGWORTH. Against 54 cents in the same line of business?

Mr. KOCHS. Yes, common labor—unskilled labor.

Mr. TIMBERLAKE. Do they work 10 hours a day, or more, over there?

Mr. KOCHS. I have no specific information, but I understand the hours have been cut. I think they work 10 hours now.

In other words, gentlemen, it costs us 12 cents per pound more to make oxalic acid for labor cost, just the actual labor cost entering into this product, than it costs the German manufacturer.

Mr. GREEN. Which process do you use?

Mr. KOCHS. We use the synthetic process.

Mr. GREEN. That is one of the latest invented processes? That is a superior process?

Mr. KOCHS. It is supposed to have advantages over the other processes, which our competitors will not admit. However, that is the process used in Germany.

Mr. LONGWORTH. When you say the foreign price is 25 cents, do you mean in our money?

Mr. KOCHS. Yes, sir. I have figures, 2 shillings 2 pence on the English product, and I think it was 42 or 44 marks per kilogram on the German product.

Mr. LONGWORTH. I wanted it to be clear that it was figured in our money.

Mr. KOCHS. Yes, sir; in gold, for comparative purposes.

Of course, if the industry is to live in this country this difference in labor cost must be equalized somehow, and it is therefore that we recommend a duty of 10 cents per pound as necessary under present conditions. If conditions change, as some of you gentlemen think they will in the next few months, we will know more about it then. I am perfectly willing to be put on the same basis as the Germans, or the foreigner, so far as labor cost goes, and to ask nothing for profit, because we can take care of that part ourselves.

Mr. GARNER. You are willing to take the difference between the cost of production here and abroad and take your chances with the foreigner?

Mr. KOCHS. Yes, sir; absolutely, as a matter of business, and I think every manufacturer should be willing to do that.

Mr. GARNER. I wish they would all agree with you

Mr. KOCHS. I was surprised at some of the statements made here. All I want to say is that we need this rate of duty if we are going to stay in business. Unless we receive adequate protection we will have to close up the shop, discharge our workmen, and lose our customers, and this country will again be dependent for this important material on foreign sources of supply. In view of the experience of the last few years such dependence on foreign countries would hardly seem wise.

Mr. COPLEY. You think, Mr. Kochs, if they should succeed in grinding out the American manufacturers, they would again put the price up?

Mr. KOCHS. Oh, undoubtedly.

The CHAIRMAN. An antidumping law would help you, would it not?

Mr. KOCHS. An antidumping clause in the tariff, and some other arrangement which would equalize the cost of production here and abroad, would put the industry in the best of shape.

Mr. HAWLEY. What was the reason that the price was down to 7 cents before these other companies came in and ruined the business?

How did they happen to get the manufacture down to that price, as the chairman stated a few moments ago?

Mr. KOCHS. My understanding is that it was never 7 cents in this country. If it was at 7, it was below cost, I think.

Mr. COPLEY. Mr. Kochs, is it not a fact that the cost of labor then, instead of being 50 cents an hour, as it is now, was around 17 to 20 cents an hour?

Mr. KOCHS. Yes, sir.

Mr. COPLEY. And is it not a fact that the cost of coke, for which you have been paying as high as $24 a ton, was then about $5.50?

Mr. KOCHS. Yes, sir.

Mr. COPLEY. And is it not a fact that the cost of coal for which you have paid as high as $11 and $12 a ton, was then $2.25 a ton?

Mr. KOCHS. Yes, sir.

Mr. COPLEY. That is the explanation?

Mr. KOCHS. That is the explanation.

Mr. LONGWORTH. And is it not also a fact that the world demand for oxalic acid is greater now?

Mr. KOCHS. The world demand? I do not know.

Mr. LONGWORTH. Is it not being used now for many more different purposes?

Mr. KOCHS. Yes. I think it is growing in this country. I think especially on account of our die industry, which is an infant industry and did not exist prior to the war, and there are other large consumers of oxalic acid.

Mr. GREEN. I might say with reference to the report, that the 7 cents that was mentioned by the chairman as the market price, was a secret price.

Mr. KOCHS. Quite so.

There have been a lot of doubtful practices indulged in in that time. I have heard of them. They were really before my time. There is another manufacturer here who is very much interested in oxalic acid and who knows of his own knowledge a great deal about that.

BRIEF OF VICTOR CHEMICAL WORKS, CHICAGO, ILL.

Oxalic acid now appears in paragraph 1 of Schedule A of the dutiable list of the present law, which levies a duty of 1½ cents per pound. It is recommended that this rate be increased to 10 cents per pound, for the reason that the cost of labor in this country is more than 10 cents per pound of oxalic acid higher than it is in Germany, the principal foreign producer. Prior to the war Germany controlled the United States market for oxalic acid, and now is again exporting oxalic acid into this country in constantly increasing volume.

Oxalic acid is used in laundries in a large way to neutralize the alkali and is the best acid rinse for that purpose, because, when properly used, it does not injuriously affect the fabric. It has an important use in the manufacture of dyes, especially malachite green, which prior to the war was all imported from abroad, but which is now manufactured on an extensive scale in this country, and is employed to a large extent in dyeing and printing textiles, especially dyeing wool on a chrome mordant. Further, it finds employment in the bleaching of straw articles, especially hats, in the manufacture of cleaning compounds and metal polishes, in the bleaching of leathers, wood, cork, and shellac, and in the manufacture of ink.

Salts of oxalic acid also find employment in the tanning and other industries. Oxalic acid is a product of great importance to many manufacturers in this country, who prior to the war had to depend on foreign manufacturers for their supplies.

AMOUNT CONSUMED IN THE UNITED STATES.

Prior to the war there was but one manufacturer of oxalic acid in the United States, viz: The American Alkali & Acid Co., of Bradford, Pa. We estimate that their annual production was in the neighborhood of 2,000,000 pounds. At the same time, in the prewar years, 1912, 1913, and 1914, there were imported into this country approximately 8,000,000 pounds. (See Tariff Information, Series No. 13, United States Tariff Commission.) The total consumption of oxalic acid in this country, therefore, in those years is estimated at about 10,000,000 pounds.

About 75 per cent of all the oxalic acid imported into this country was of German manufacture, about 12½ per cent was the product of northern Norway, and 12½ per cent the product of the United Kingdom.

DEVELOPMENT OF THE INDUSTRY.

Prior to the war there was but one American manufacturer producing oxalic acid on a large scale. This was the American Alkali & Acid Co., of Bradford, Pa., which manufactured oxalic acid from sawdust.

In 1916 and 1917, after several years of research work and the erection of a large plant, this company, the Victor Chemical Works, of Chicago, Ill., began the manufacture, on a commercial scale, of oxalic acid by the synthetic process, using carbon monoxide gas and caustic soda as its principal raw materials.

The investment to date of the Victor Chemical Works in its plant is in excess of $600,000. Its plant is designed to produce 5,000,000 pounds per year, which production can be increased by plant addition.

Until a few months ago the Victor Chemical Works was producing at the rate of 3,000,000 pounds per year, but owing to the effect on the market of heavy importations offered to the consuming trade in this country at considerably below the cost of manufacture, the plant is now closed down.

Besides the two American manufacturers who are still in business, viz: The American Alkali & Acid Co. and the Victor Chemical Works, the following companies manufactured oxalic acid in this country until recently:

The North American Chemical Co., Milwaukee, Wis.
Essex Co., Lawrence, Mass.
Semmet-Solvay Co., Syracuse, N. Y.
United States Industrial Co., New York City.

These four manufacturers, however, finding themselves unable to compete, have abandoned the business and dismantled their factories.

If the domestic manufacturers of oxalic acid are afforded the reasonably adequate protection of a duty of 10 cents per pound, the present manufacturing facilities of the country are ample to supply all the domestic requirements, and it is safe also to predict that any increase in the demand would be quickly met by the extension of existing plant facilities, or by new companies entering the field.

The production of 10,000,000 pounds of oxalic acid per year requires about 1,000 men in the direct manufacture. To these should be added about 300 more men, who are employed in the production of raw materials used in the manufacture of oxalic acid which in the case of the Victor Chemical Works are caustic soda, sulphuric acid, lime, coal and coke, so that the number of individuals who find employment in the oxalic acid industry, and because of it, may be conservatively stated as 1,300 men.

PRODUCTION COSTS AND COSTS IN FOREIGN COUNTRIES.

The actual cost of producing a pound of oxalic acid during the four months ending October 31, 1920, taken from the books of the company, and the last figures of continuous operation available, show a manufacturing cost of 24¼ cents per pound of oxalic acid. This cost is made up as follows:

	Per pound.
Labor	10.8
Raw materials	11.54
All other expenses, including power, factory operation, depreciation (not interest, nor overhead, nor selling expense)	1.91
	24.25

As stated before, 75 per cent of all the oxalic acid imported into this country in prewar years, came from Germany, and it is the German product which is entering our market again, and which is being offered at prices below our cost of production. A comparison, therefore, with the cost in Germany is important.

Our latest information is that the German workman receives the equivalent of 54 cents as his daily wage. Our lowest daily wage for common labor at this writing is $5 per day, so that, as shown above, we paid 10.8 cents for labor, per pound of oxalic acid produced during the last four months of our operation, while the German manufacturer would only have to pay 1.16 cents per pound of oxalic acid. In other words, the labor cost entering directly into the production of oxalic acid is 9.64 cents per pound greater than it is in Germany at the present time. Nor does this tell the whole story. The same difference in labor cost which applies to the labor employed in the direct manufacture of oxalic acid, also applies in favor of the German manufacturer in the labor used for the production of raw materials.

As will be noted from our factory cost sheet, we use, per pound of oxalic acid, raw materials to the value of 11.54 cents, and it is safe to figure that at least one-fourth of this raw material cost is represented by labor, or about 2.9 cents per pound. This labor the German obtains for 0.31 cent, so that the labor required in the production of the raw material used in a pound of oxalic acid, costs in this country 2.69 cents per pound more than in Germany.

Summarizing these facts, they show that the American manufacturer is paying, for labor only, 12.33 cents per pound more than his German competitor.

Since labor is also an important element in the cost of plant equipment, transportation, and other items of indirect manufacturing costs, it will be appreciated that the advantage of 12.33 cents per pound of oxalic acid, which the German manufacturer enjoys over the American producer, by no means expresses the full advantage.

METHODS OF FOREIGN COMPETITION.

German oxalic acid has been sold during the last few months at prices ranging from 15 cents to 19 cents per pound, which was so far below our cost of production that it was impossible for us to meet such price, and it became necessary, therefore, to discharge our men and to suspend factory operations. While prices as low as 15 cents per pound were quoted, our advices from the United Kingdom and from Germany were that oxalic acid was being sold in those countries at the same time at a price equal to 30 cents per pound. It is quite evident, therefore, that these goods were dumped on the United States market, probably to get rid of surplus stocks, and also to put the American manufacturer out of business.

Not having been in the business prior to 1914, we did not come in contact with such unfair and destructive business methods until lately, but we refer to hearing on H. R. 4870, June 10–11, 1919, where the representative of the American Alkali & Acid Co. testified that during the years 1909 to 1914 they had lost on an average of $100,000 per year because of the market conditions created by importation of oxalic acid of German origin.

We also quote from an article of A. Mitchell Palmer, former Alien Property Custodian, written in the Saturday Evening Post of July 19, 1919, which refers to oxalic acid, as follows:

"In 1901, when there was none of it produced in this country, it was sold by the Germans at about 16 cents. Two years later, when the American Alkali & Acid Co. began producing, the price was at once dropped to 4.7 cents, at about which point it remained for four years, when the American company shut down. Thereupon the Germans jumped the price to 9 cents. When the factory reopened the price was lowered again, and in 1908 the American company failed."

At the present time our oxalic-acid factory is closed entirely, and we understand that the other American oxalic-acid factory has suspended operations, either wholly or in part. Since the armistice the four other manufacturers above mentioned, who had constructed plants to manufacture oxalic acid, have discharged their employees, closed their works, and abandoned the business.

We submit that the record is rather complete as to the destructive effect of this foreign competition on American manufacturers.

The present rate of duty of 1½ cents per pound affords only one-third of the protection now that it did in 1913, when it was enacted, and it was inadequate then.

The United States Tariff Commission, in "Tariff Information, Series No. 13," gives the approximate value of oxalic acid during the prewar years 9111, 1912, 1913, and 1914, at approximately 5 cents per pound, so that a duty of 1½ cents at that time was equivalent to an ad valorem duty of 30 per cent. To-day our actual cost of manufacture is approximately 25 cents per pound, and the lowest price at which the material has been dumped during recent months on the American market has been 15 cents per pound, and the duty paid thereon, of 1½ cents per pound therefore now represents an ad valorem duty of only 10 per cent instead of 30 per cent, the duty fixed by the act of 1913.

RATE OF 10 CENTS PER POUND ON REVENUES.

A duty of 10 cents per pound will by no means exclude importations, because, as shown above, the advantage which the foreign manufacturer has of a saving in the cost of labor more than offsets this duty of 10 cents. Laying of such a duty, however, will encourage the American manufacturers to build up the business, and while they always will be subject to foreign competition, even under such a duty, they will be better able to meet this competition.

It is expected that the imports would decline, but even if they were cut in half, and instead of imports of 8,000,000 pounds, these were reduced to only 4,000,000 pounds, there would still be, at the rate of 10 cents per pound, a tariff revenue of $400,000 per year, as compared with a revenue of $120,000 derived from the importation of 8,000,000 pounds per annum, the quantity imported during 1912, 1913, and 1914. Besides this, the Government receives taxes from the domestic corporations and from the 600 to 1,300 American workmen, chemists, and business men who find employment in the industry.

A duty of less than 10 cents per pound will not afford sufficient protection to the industry to continue, and a lower rate than this would probably mean handing over the market to the foreign manufacturers, making American industry dependent for an important raw material on foreign sources.

It would also mean the destruction of a large capital investment in this country, and of the remunerative employment of hundreds of American workmen.

C. E. McCAFFERTY, SECRETARY AND TREASURER AMERICAN ALKALI & ACID CO., BRADFORD, PA.

Mr. McCAFFERTY. C. E. McCafferty, secretary and treasurer American Alkali & Acid Co., Bradford, Pa. [Reading:]

Mr. Chairman and gentlemen of the Ways and Means Committee, the American Alkali & Acid Co., of Bradford, Pa., pioneers in the manufacture of oxalic acid in the United States, most respectfully submit to your committee the following data:

Oxalic acid now appears in paragraph 1 of Schedule A of the dutiable list of the present law which provides a duty of 1½ cents per pound, and we most respectfully request that your committee recommend that this paragraph be changed to read 10 cents per pound. In support of the justice of our request, we refer you to the statements of Lewis Emery, jr., of Bradford, Pa., in behalf of our company, part 2, hearings before the Committee on Ways and Means, House of Representatives, on Schedule A, "Chemicals, oils, and paints," January 7, 1913, page 253; also to the data compiled by the United States Tariff Commission, Information Series No. 13, the acids of paragraph 1 and related materials provided for in the tariff act of 1913, pages 59 to 65, inclusive.

DESCRIPTION AND USES.

Oxalic acid is a white crystalline solid which occurs naturally in many plants, especially oxalis acetosella (wood sorrel), but commercial supplies are obtained by chemical processes instead of extraction from natural sources. It has a great variety of uses, the largest probably, in commercial laundries as an acid to rinse out the last traces of alkali or soap and to remove iron stains. It is also used in the dyeing and printing of textiles, for bleaching leather, cork, wood, straw and shellac, and as an ingredient in metal polishes and gas mantels, also the manufacture of malachite green in which it is absolutely necessary and this latter is an outcome of war activities and several factories are now in operation in the United States and are dependent upon oxalic for their process. Some of its salts are used in medicine and in photography.

NATURE OF FOREIGN COMPETITION TO WHICH AMERICAN INDUSTRY IS SUBJECTED.

The foreign competition originates in Norway, England, Holland, and Germany. In the prewar years Germany exported more oxalic acid to the United States than all other combined countries, amounting to 6,020,120 pounds, or 75 per cent of a total of 8,046,380 pounds in the year 1913, and approximately the same in 1914. During the war years, 1917, 1918, 1919, 1920, large amounts of oxalic acid were imported from Holland, and we believe that the oxalic acid shipped from Holland either originated wholly, or in part, in Germany and the method of marketing this acid followed closely the precedent established by Germany.

ADAPTABILITY OF AMERICA TO PRODUCE OXALIC ACID.

America is thoroughly adapted to produce oxalic acid as she produces all the raw materials which enter into the manufacture of oxalic acid by the sawdust process, which is used by our company. Prior to the war, we were largely dependent upon Germany for potash, but the development of war industries have brought about the production of potash in the United States. The raw potash is not adapted to our process, but when manufactured into caustic potash it answers our purpose. Of course, the price of American potash is very much higher than the potash produced in Germany. The American Alkali & Acid Co. is in a position, if conditions demand it, to produce 5,000,000 pounds of oxalic acid per year. In the prewar years our reason for not producing our full tonnage was due to the losses we were compelled to absorb in competition with Germany, as we had reduced our costs to a minimum and as these costs were higher than the sales price, the more goods we produced the greater our loss. During the years of the war, our failure to produce was due to our inability to secure the necessary raw materials, as the raw materials developed in the United States were not available in quantities until after the war activities were over. Under the present conditions at our factory, producing in the neighborhood of 5,000 pounds a day, or about 2,000,000 pounds per year, we employ about 100 men at an average wage of $5 per day, as against 50 cents per day in Germany.

TREND OF IMPORTS AND PRICES.

[Extracts taken from Tariff Commission report.]

The Tariff Commission figures are incorporated here as data on the imports of oxalic acid and sale prices so far as available from 1906 to 1919:

On or about—	1906	1907	1908	1909	1910	1911	1912	1913
Jan. 1	5 -5½	8.6-9	7 -7½	6.4-7	7½ -7¾	7½ -7¾	7.3-7½	7.1-7¾
Apr. 1	5.4-5½	7¾ -8	6¾-7	6.4-6.6	7½ -7¾	7½ -7¾	7.4-7.8	8 -8.1
July 1	6 -6½	8¾ -9¾	6½	6.1-6½	7.2-8	7.1-8¼	8.1-8¼	7.8-8
Oct. 1	6¾ -7	8.1-8½	6¾-7	7¾ -8	7½ -8	7.1-7.7	8 -8½	7¾ -8

On or about—	1914	1915	1916	1917	1918	1919	1920
Jan. 1	7.1- 7¾	13-14	50-51	47 -57	45-46	36-48	33-35
Apr. 1	7.4- 7¾	18-18.5	78-80	44 -46	45-46	39-32	24-35
July 1	7½ - 7¾	25-26	64-65	46.5-47	42-44	23-25	59-62
Oct. 1	18 -20	41-42	60-62	46 -49	41-42	23-24	15-20

The prices as indicated in this schedule do not reflect the sales price so far as the manufacturer is concerned, as the actual price paid the manufacturer is much lower than the retail price, due to the fact that oxalic acid is sold largely in laundry supply houses, wholesale chemical houses, and wholesale druggists, who must of a necessity make a profit. During the years 1915 to 1920, inclusive, the prices registered were more or less created by the enormous number of chemical brokers who appeared in the market and bought and sold oxalic acid without actual delivery, or on speculation and the price of such sales were registered as the prevailing market. In some cases they had to make actual purchases to cover sale where delivery was demanded, then and then only did the manufacturers receive the benefit of the higher prices asked. The broker, as a rule, made a firm offer for their requirements, which always was less than their actual sale price, so they would be assured of a profit.

Extract taken from Tariff Commission's report, Series No. 13, page 62, shows by years from 1910 to 1919, inclusive, the imports of oxalic acid for use in the United States.

NOTE.—Particular attention is called to the decline in the percentage of the ad valorem rate as computed. The said decline being from 40.66 per cent to 3.65 per cent, which is evidence that the present duty of 1½ cents is not sufficient to protect the oxalic acid industry in the United States. If the duty as originally charged were applied to-day on a percentage basis, it would bring the duty to about 10 cents or more per pound, which is exactly the duty we are asking.

Fiscal years.	Rates of duty.	Quantity.	Value.	Duty.	Actual and computed ad valorem rate.
		Pounds.			*Per cent.*
1910	Free	1,002,526	$61,271.00		
	2 cents per pound	4,832,453	279,714.00	$96,651.00	34.55
1911	do	7,053,499	363,353.00	141,077.00	38.83
1912	do	7,077,462	351,449.00	141,549.00	40.28
1913	do	8,049,380	402,960.00	160,927.00	39.94
1914	do	1,617,682	79,567.00	32,353.00	40.66
	1½ cents per pound	7,163,170	354,216.00	107,447.00	30.33
1915	do	4,496,679	262,422.00	67,450.00	25.70
1916	do	522,549	166,117.00	7,838.00	4.72
1917	do	1,183,356	527,827.00	17,749.00	3.36
1918	do	757,553	311,290.00	11,363.00	3.65
1919	do	456,698	54,041.00	6,850.00	4.45
1920 (10 months)	do	1,968,251	[1] 590,041.00	29,523.76	[1] 5.00

[1] Estimate.

DESCRIPTION OF FOREIGN AND DOMESTIC COSTS.

Our cost of manufacturing oxalic acid to-day in the United States under the present conditions is 23.6 cents per pound, made up as follows:

Comparison of costs per pound of oxalic acid produced for the years 1914 and 1920:

	1914	1920	Per cent.
Labor	$0.0238	$0.1015	326.4
Raw materials	.05695	.1032	81.2
Other costs	.01714	.0317	84.9
Total	.09789	.2364	

The market price in 1914 would indicate a profit as between the manufacturing cost and the recorded market price, but this is not true, as our product was contracted in 1914 at from 7 cents to 7½ cents per pound, and all purchasers took the maximum amount of their contract, and our company, as a result, lost money during that year. We have no definite information at the present time on the cost of manufacturing oxalic acid abroad, other than that we are informed that labor is paid at the rate of 40 marks, or about 50 cents, per day, as against an average wage paid by the American Alkali & Acid Co. of $5 per day. The question has been asked on what authority we based our German wage scale, and we most respectfully refer you to a recent report by Mr. Howard W. Adams, representing the Department of Commerce, now residing in Berlin, whose figures we have used as a basis of calculation. We produce 5,000 pounds of oxalic acid a day and employ 100 men, which equals about 10 cents per pound for the oxalic acid produced, whereas Germany under the same conditions would produce a like amount for 1 cent per pound, a differential in favor of the German manufacturer on labor of 9 cents per pound on oxalic acid produced. The foreign article is being offered in the United States as low as 15 cents per pound, which is about 9 cents less than our cost of manufacture. In the market abroad, oxalic acid is quoted at 2s. 2½d. per pound and 58 marks per kilo. Both these prices reduced to American money on the basis of the present rate of exchange equals about 36 cents per pound, which is evidence that the surplus of the foreign manufacturers is being dumped in the United States, with the evident intent of destroying the American industry.

The factories abroad of which we have knowledge are:

The Chemische Werke, Bitterfelt, Germany; Rud. Koepp & Co., Oestrich, Rhein, Germany; Jacobson Factory, Bergen, Norway; Pritchards Factory, Swansea, Wales, the largest of these being the two German factories.

In addition to the factory of the American Alkali & Acid Co. constructed in 1903 and with a present investment of about $1,000,000, there have been four other factories built to manufacture oxalic acid in the United States. The Victor Chemical Co., of Chicago, Ill., is the only survivor of the four. The Semet-Solvay Co., of Syracuse, N. Y., has discontinued the manufacture of oxalic acid. The North American Chemical Co., of Milwaukee, Wis., and the Essex Chemical Co., of Law-

rence, Mass., failed in 1919 and their plants have been dismantled. After making the investment in research and plant, they found they could not produce goods at a cost to insure a profit on the prevailing market as made by the foreigners.

UNFAIR PRACTICES OF COMPETITORS.

As to what we deem unfair practices of competitors, we are incorporating herewith an extract from the report of A. Mitchell Palmer, as Alien Property Custodian, which demonstrates clearly the methods pursued by Germany in its competition with the manufacturers of oxalic acid in the United States by the dumping of their surplus goods in this country and the sale of same at less than cost of manufacture:

"In 1901, when there was no American manufacture, it was sold by the Germans at 6 cents. In 1903, when the works of the American Alkali & Acid Co. was started, the price was immediately dropped to 4.7 cents, at about which figure it remained until 1907, when the American factory was shut down for a number of months. During the shutdown the price was instantly raised to 9 cents. When the factory reopened the price was again dropped until 1908, when the company failed."

To-day, as previously stated, the foreigners are receiving for their acid at home the sum of about 36 cents per pound. They are selling their goods in the United States at 15 cents per pound. The two prices together will give you 51 cents, or a mean price to the foreign manufacturer of 25½ cents per pound for his production, which gives them a larger return on their gross sales than we receive in the United States. If we make sales we are compelled to meet the competition of 15 cents per pound set by the foreigners.

A duty of 10 cents per pound on this commodity would insure a good revenue to the Government, as the foreigners will endeavor to market all their surplus goods in the United States, as they have in the past. The difference in the cost price to the consumer would be practically nothing, for if the request for a duty of 10 cents per pound on oxalic acid is not granted the American manufacturers ill be compelled to close down their factories. Our factory is at present shut down, owing to the current sales price of 15 to 18 cents established by our foreign competitors, which is from 6 to 9 cents below our manufacturing cost, and the foreign manufacturers will pursue the methods which they have in the past, of immediately raising the price and the consumer will be penalized, whereas with a duty of 10 cents per pound on oxalic acid and its salts the American manufacturer will be protected against absolute destruction and will act as competiton to the foreign manufacturers, thus forcing them to keep their prices down to the minimum in order to get any business in the United States; and as the consumption abroad is not sufficient to take care of their entire production, their surplus goods will come to this country to at least 50 per cent of their prewar exports, or about 4,000,000 pounds, and the United States will benefit in the form of revenue to the extent of about $400,000. In addition they will receive the revenue from whatever profits the corporation or individual manufacturing oxalic acid may make also from the various industries supplying the raw materials as well as from individuals employed in the industry within the United States. In the prewar years the oxalic-acid manufacturers in Europe, including Germany, England, Norway, Russia, France, Switzerland—in fact, all the European countries—formed a combination which controlled the selling price of oxalic acid in continental Europe and the British Isles. The United States of America was the dumping ground for the surplus acid produced by these manufacturers, and they were at liberty to sell the goods at any price they might elect in this country, disregarding the price established by the trust for the sale in the protected territory, and there is no reason to doubt that by the destruction of the American industry the practice so far as possible will be resumed.

We are firmly of the belief that if your committee should see fit to recommend a duty of 10 cents per pound on oxalic acid, that it would in no way work a hardship on the consumer, as the price would not materially advance; the foreign manufacturers would continue to market their surplus in the United States and the continued operations of the factories in the United States would discourage the raising of prices by the foreign manufacturers, as practiced in the past.

Mr. GREEN. Do you use the sawdust process?

Mr. MCCAFFERTY. The sawdust process; yes, sir.

Mr. GREEN. So that the duty on potash would also enter into consideration in this connection?

Mr. MCCAFFERTY. Absolutely.

Mr. GREEN. It is very important that we should keep those matters in mind in connection with this industry.

Mr. MCCAFFERTY. We appeared before the committee on June 10, 1919, on that same subject. That is a matter of record.

Mr. LONGWORTH. Are you getting any potash from Alsace?

Mr. MCCAFFERTY. No, sir.

Mr. LONGWORTH. Can you get any from Alsace?

Mr. MCCAFFERTY. We can, but we have been buying American potash. We always bought American potash wherever available. We have never imported any direct.

TARTARIC ACID, ARGOLS, AND WINE LEES.

[Paragraphs 1 and 8.]

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

Argols and tartaric raw materials containing no more than 90 per cent of potassium bitartrate are now subject to a duty of 5 per cent ad valorem, and above 90 per cent of potassium bitartrate to 2½ cents per pound, the same rate being levied on cream of tartar and Rochelle salts; tartaric acid is rated at 3½ cents per pound.

Argols and wine lees are the raw materials from which cream of tartar, Rochelle salts, and tartaric acid are manufactured. They are by-products of the wine industry, the only available source of tartaric acid, which has not yet been obtained synthetically. Tartaric acid and its salts are used chiefly in the preparation of medicinal compounds and of food products, as in baking powders and beverages, as mordants in the printing of fabrics, and in other technical uses. The most important use is in the manufacture of one variety of baking powder, extensively consumed in this country in domestic bread making and also exported. The yearly output of the baking-powder industry alone represented in the United States, according to the census of 1914, a value of nearly $22,500,000 and an invested capital of over $35,000,000, giving work to over 3,600 persons. Exports of these which had, like the industry, been steadily increasing, represented in the fiscal year 1918 nearly $2,000,000. Even before prohibition was enacted, which cut off any American supply, the American wine industry furnished only 1 per cent of the world supply of tartaric raw materials. This country to-day is wholly dependent upon the wine-making countries of the Mediterranean, and chiefly upon Italy, France, Algeria, Spain, and Portugal for its importations of tartaric raw materials. Importations taking one year with another and allowing for war or tariff conditions have been pretty steady, with a tendency of late years to increase, as shown by the fact that, while during the first five years of the past decade they averaged yearly about 28,035,000 pounds, they have during the last five years averaged 30,050,000 pounds.

It has been the traditional policy of the United States to encourage the importation of these crude materials, and this policy should be adhered to by leaving unchanged the present ad valorem rate of duty on argols or crude tartars and wine lees, which befits a product the value of which varies according to its actual contents in tartaric acid.

Imports of cream of tartar, gained with the removal of the 5-cent rate, which obtained previous to fiscal year 1914, and had kept importations for the period 1911–1913 at a yearly average of 57,710 pounds. The present rate of 2½ cents per pound, which replaced the former in 1914, has increased importations to a yearly average, for the three fiscal years ending June 30, 1918, to 68,556 pounds, the large amounts imported in 1914 and 1915, respectively, of 812,857 and 764,868 pounds, being due not solely to the change in the tariff but mostly to the stress of war conditions, stimulating importations in order to provide for emergencies, as evinced by their falling back to a more conservative average in the following years. This shows that the readjustment of the rate under the tariff act of 1913 has operated advantageously for the interests of revenue and practically without prejudice to American refiners, as the unabated, in fact increased, imports of raw materials clearly demonstrate.

A somewhat analogous course is shown by the importations of tartaric acid, which from a yearly average of 149,014 pounds for the period of fiscal years 1909–1913, when the rate was first 7 and then 5 cents per pound, increased with its reduction to 3½ cents in the last tariff act to an annual average of 393,588 pounds during the last five fiscal years, after having attained somewhat striking totals in 1914 with 848,574 pounds, under the stimulus of the tariff change and in 1915 with 820,105 pounds under the stress of providing for war emergencies. It is true that importation from a moderate increase in previous years, accentuated somewhat in 1920, when a total of 797,367 pounds was reached, but this is due solely to the exceptional conditions of the foreign exchange which have prevailed during that period, the only time when it became possible for foreign manufacturers on account of the unprecedented depreciation of

the lira to sell their articles to any extent on this market, which had always before been controlled almost entirely by home manufacturers. Had it not been for the exceptionally abnormal exchange, foreign manufacturers would not have been able to sell to any appreciable extent on this market, the tariff having, since the war, played a relatively unimportant rôle in influencing imports into the United States in comparison to the exchange, with its striking fluctuations.

The present spasmodic conditions of exchange can not, however, last much longer, as they are neither in the interest of Europe nor of this country. A more settled and stable condition is bound to follow in the no great distant future, and it would unquestionably be unfair and inequitable to base our calculations in assessing duties to-day on the existing disparity, which can not endure. If they were so based, upon return to more normal conditions the protection accorded to domestic manufacturers would be increased to such extent as to work prohibitively on importation, and, while giving the farmers an undesirable monopoly of the market, would also void the purposes of revenue and destroy a sound competition that alone would ultimately benefit the consumer.

The cost of manufacture in Italy has increased greatly since the war, labor being paid now for an eight-hour day fivefold what it received before the war for a nine-hour day. In the supply of materials required in the manufacture other than tartaric raw materials it is almost superfluous to state that Italy is at a great disadvantage when compared with this country, especially in the items of machinery, coal, and chemical supplies, which it has to import from this country, on which it has to pay freight and duty, and which offset any disadvantage of the American manufacturer for the difference of freight paid on the greater bulk of the tartaric crude material in comparison to the finished products.

As soon as an improvement in exchange shall have eliminated that margin, which only of late has made possible importations into this country, and as soon as a more settled state of industrial conditions, both here and abroad, shall have made more stable the present fluctuating cost of production, it will be seen that the present rate on tartaric acid is sufficiently protective for domestic manufacturers, who have found in the increased consumption of tartaric acid, through the enactment of prohibition, a compensating factor for the temporarily increased imports of this useful organic acid.

The present rates of 3½ cents per pound on tartaric acid and of 2½ cents per pound on cream of tartar have stimulated imports without visible prejudice to American manufacturers, whose importations of crude materials have continued to be equivalent to more than five times that of the refined articles, and appear, therefore, to this chamber as the optimum rates, both for the purpose of revenue and for that of protection, and this chamber therefore asks that they continue unchanged.

PRODUCTS OF HARDWOOD DISTILLATION.

[Paragraphs 3, 29, 32, 387, 393, 447.]

W. J. MERWIN, PRESIDENT NATIONAL WOOD CHEMICAL ASSOCIATION, BRADFORD, PA.

Mr. TREADWAY. What association are you president of?

Mr. MERWIN. National Wood Chemical Association, which represents 69 operators.

BRIEF OF THE NATIONAL WOOD CHEMICAL ASSOCIATION.

GENTLEMEN: The National Wood Chemical Association, which I represent, includes in its membership 69 firms or corporations operating a total of 79 plants, whose daily capacity consists of 3,862 cords of wood. The total number of firms or corporations engaged in this industry in the United States is 83, and the total number of plants operated 97, with a daily capacity of 5,575 cords of wood.

Our members are engaged in producing crude wood alcohol, acetate of lime, and charcoal; some of them operate additional plants for refining, in which are produced methanol (refined wood alcohol), formaldehyde, acetone, acetic acid, and other derivatives. The total capacity of all the plants in the United States is approximately 10,000,000 gallons of wood alcohol of 82 tralles annually, all of which is refined in the country; also 100,000 tons (2,240 pounds per ton) of acetate of lime, and approximately 47,000,000 bushels (20 pounds per bushel) of charcoal. In these operations there is required approximately 1,672,000 cords of hardwoods. The plants are scattered over several States, viz, New York, Pennsylvania, West Virginia, Kentucky, Tennessee,

Alabama, Mississippi, Missouri, Michigan, and Wisconsin, and in their operations, which follow closely on the heels of lumbermen, they recover a vast quantity of raw material that would otherwise be wasted. The land that is cleared up becomes valuable for agriculture, particularly in the Southern States.

The plants in this industry represent an investment of approximately $76,000,000, providing employment and sustenance directly to 100,000 people. The derivatives of the crude products are used largely in the manufacture of other substances in whose manufacture and use hundreds of millions of dollars and large numbers of men are employed.

At the present time the industry is in a state of almost total collapse, a majority of the plants being idle or operated at reduced capacity, owing to inability to market their principal products, which consists of wood alcohol and acetate of lime. The reason for this is overproduction, and the causes of overproduction are largely due to conditions growing out of the war. Prior to the year 1914 probably 80 per cent of the total production of wood alcohol and 60 per cent of the acetate of lime was used for domestic consumption and the balance exported. With the outbreak of the war the export business was, of course, stopped; but a tremendous demand was created for both products, which were required by the British and other Governments in the manufacture of war material. This demand increased to such an extent that on January 1, 1918, the United States Government commandeered the total production, in addition to which it financed the construction of five large plants for hardwood distillation, encouraged the production of acetic acid and acetone from corn, and also financed the production of acetic acid by the carbide process in Canada. At the close of the war large stocks of acetate of lime were left on hand, the export business was destroyed, home markets using substitutes, and with the increased capacity promoted during the war the industry stands to-day in a position where it can produce vastly more than the market requires.

Conditions existing in other countries, with the exception of Canada, are such that there is no need to fear their competition. In Canada, however, there are a number of plants producing all of these products under conditions that compare favorably with those in the United States.

A prominent instance of competition from foreign-made goods exists at Shawinigan Falls, Quebec, where there is a large hydroelectric power company manufacturing calcium carbide. In this process there is a waste product known as fines. From these fines, together with a surplus of electric power, acetic acid is manufactured. The use of a waste product and surplus electric energy which otherwise would have no value enables these manufacturers to produce acetic acid so much cheaper than is possible by the destructive distillation of wood that it is shipped into this country and undersells the domestic product, for there is no duty on the imports of these commodities from Canada to the United States, and in cases where there is a surplus in Canada it naturally seeks a market in this country.

CANADIAN RATES OF DUTY.

On exports from the United States to Canada there is a high protective duty, as follows:

Methyl alcohol, $3 per imperial gallon.
Wood alcohol, $3 per imperial gallon.
Acetate of lime (crude), 17½ per cent ad valorem.
Acetic acid (crude) of any strength not exceeding 30 per cent, 25 per cent ad valorem.
Acetic acid (not otherwise provided) of any strength not exceeding the strength of proof, 15 cents per imperial gallon.
Amyl acetate, 30 per cent ad valorem.
Formaldehyde, 25 per cent ad valorem.
Charcoal, 17½ per cent ad valorem.
Acetone, 30 per cent ad valorem.

DUMPING CLAUSE.

In addition to this duty there is a dumping clause as follows:

The following declaration must be made on every invoice, viz.:

(1) That I am the said exporter of the goods in the within invoice mentioned or described;

(2) That the said invoice is in all respects correct and true;

(3) That the said invoice contains a true and full statement showing the price actually paid or to be paid for the said goods, the actual quantity thereof, and all charges thereon;

(4) That the said invoice also exhibits the fair market value of the said goods at the time and place of their direct exportation to Canada and as when sold at the same time and place in like quantity and condition for home consumption in the principal markets of the country whence imported directly to Canada, without any discount or deduction for cash or on account of any drawback of bounty or on account of any royalty actually payable thereon or payable thereon when sold for home consumption, but not payable when exported, or on account of the exportation thereof or for any special consideration whatever;

(5) That no different invoice of the goods mentioned in said invoice has been or will be furnished to any one; and

(6) That no arrangement or understanding affecting the purchase price of said goods has been or will be made or entered into between the said exporter and purchaser or by anyone on behalf of either of them, either by way of discount, rebate, salary, compensation, or in any manner whatsoever other than as shown in the said invoice.

(a) That each article on this invoice is bona fide the produce or manufacture of the country specified on the invoice as its country of origin;

That each manufactured article on the invoice in its present form ready for export to Canada has been finished by a substantial amount of labor in such specified country of origin and not less than one-fourth of the cost of production of each such article has been produced through the industry of the said country.

WOOD ALCOHOL.

The wood alcohol produced in this country is used for producing celluloid and similar products, dyestuffs, denatured alcohol, photographic films, formaldehyde, artificial leather, varnishes, shellacs, etc. European countries use nearly as much wood alcohol as the United States, chiefly for denaturing ethyl alcohol, for the manufacture of formaldehyde, aniline colors and for other purely chemical purposes. Pure methyl (wood alcohol) is the only substance which can be converted on a commercial scale into formaldehyde which is universally used as a disinfectant against contagious diseases. It is further used as a disinfectant for seeds which are sterilized before planting. By this disinfection crop losses due to certain fungi can be greatly reduced. It is further used in large quantities in the preparation of various dyes.

ACETATE OF LIME.

Acetate of lime is used principally in the manufacture of acetic acid and acetone. Acetic acid is used largely in the dye and white lead industries. Acetone is a solvent used principally in the manufacture of high explosive powders such as cordite and lyddite.

CHARCOAL.

Charcoal is used principally in the manufacture of charcoal pig iron and for smelting copper, brass and nickel and in the production of alloys. Also in the manufacture of black blasting powder which is commonly used in coal-mining operations, for case-hardening compounds, foundry facings, and to some extent for a domestic fuel. It is the least valuable of the products and finds its principal use in the manufacture of charcoal pig iron.

REPORT ON INDUSTRY.

The Forest Products Laboratory and the Department of Commerce have at various times made extensive reports on the industry and perhaps the most complete report, is contained in the 68-page pamphlet published in 1916 by the Department of Commerce Special Agent Series 110.

PROTECTION DESIRED.

It is respectfully submitted that there should be a duty placed upon these products equal at least to Canadian duty, which will place the home manufacturer upon an equal footing with his neighbor as a help to stabilize the industry.

S. H. STILLING, OF THE WOOD PRODUCTS CO., BUFFALO, N. Y.

Mr. STILLING. Mr. Chairman and gentlemen of the committee, I represent the Wood Products Co., of Buffalo, N. Y., the largest refiners of wood alcohol in the United States. We are not particularly interested in protection in the common acceptation of this word, because we believe this country is big enough in natural resources and has the technical skill and ability to enable us to compete with any other country having the same labor costs. We are, however, very much interested in any set of laws which will permit Canada, for instance, to maintain high prices in her domestic market and sell her surplus of wood chemicals in this country at prices below those charged at home. I feel that no argument is needed on this point to convince you of the unfairness of such a condition.

Mr. HULL. This is her logical field for selling that supply?

Mr. STILLING. It is her logical field.

Mr. HULL. To dump her surplus?

Mr. STILLING. If you have no dumping clause. They have a dumping clause against that.

Mr. OLDFIELD. Have they protection against ours?

Mr. STILLING. Yes; they have protection against us.

Mr. OLEFIELD. Is their tariff higher than ours?

Mr. STILLING. We have no tariff against them.

Mr. OLEFIELD. What is their tariff value?

Mr. STILLING. On wood alcohol, $3 an imperial gallon, about $2.40 on an American gallon.

The conditions existing in all other countries except Canada are such that there is little to fear from their competition. In Canada, however, conditions affecting wood distillation are similar to those existing in the United States and we see no reason why their cost of production should exceed ours. The Canadian output of wood chemicals is far greater than their domestic needs and they are obliged to seek a foreign market for the greater part of their production. The Canadians, having a high protective duty, can and do maintain very high prices for all grades of wood alcohol to their domestic buyers, so that they are in a position to export to this country at any time, there being absolutely no duties on wood alcohol, that their market conditions make it advisable to do so.

Previous to the war Canada exported to this country from time to time considerable quantities of wood alcohol, but during the war the demand for it abroad was so great that none was exported to the United States. With the return to normal conditions we can see no reason why, with the high protective tariff against us and their ability to obtain high prices in Canada, they should not seek a market here for their surplus, and we certainly expect to find them in our market in the near future. Canada has an ample supply of wood, as low prices for labor as we have, and with a well organized wood distillation industry established there, we believe this country will prove an attractive market for them.

During the past three months conditions have been such that the surplus output of wood chemicals made in Canada would supply our entire demand for them without using anything whatever produced by the manufacturers in this country. Within the past six months we have taken from the Canadians a quarter of a million gallons of

crude wood alcohol. Ninety-eight per cent of this is stored in our tanks. This action was taken on our part to protect our market from demoralization, as we were aware that they were making arrangements to ship this gallonage to the United States in the form of refined goods.

We respectfully suggest that the duty on all grades of crude and refined methyl alcohol, acetone (this to include pure acetone, commercial acetone, and methyl acetone), acetate of lime, and formaldehyde should be fixed at not less than the present Canadian tariff and that a dumping clause similar to that contained in the Canadian tariff should also be made a part of the protection.

I have stated that during the last six months that we have taken a quarter of a million gallons of Canadian crude alcohol. At the present time they are running only about 40 per cent capacity in Canada, and their domestic trade is taking care of the output.

Mr. GREEN. How much do you say has been imported?

Mr. STILLING. A quarter of a million gallons during the last four or five months.

Mr. GREEN. There does not seem to be any record of it in the tariff reports.

Mr. GARNER. There is no duty at the present time.

Mr. STILLING. There is no duty, and it probably would not be reported.

Mr. GREEN. That does not make any difference. They would report all articles that come into the country anyway.

Mr. STILLING. It all passed through, and was inspected by the customhouse in Buffalo, because I had one of the officials down there in my office several times. When the first car came across he thought it might be some other kind of alcohol.

Mr. GREEN. I do not doubt but what that amount has been shipped in during the last four months.

Mr. STILLING. It has been received in Buffalo. It was shipped in September, but it did not arrive in Buffalo until October, November, and December.

Mr. GREEN. Well, that accounts for it because I have nothing in the reports here later than October.

Mr. STILLING. That would be the reason. While it was shipped in September, it did not arrive in Buffalo until the first of October. While we have taken this quarter of a million gallons, at the present time they are only running about 40 per cent capacity, and consequently the domestic consumption is able to take care of the output, but when they start up and begin running 100 per cent capacity, they will have a surplus of from 65 to 80 thousand gallons a month which undoubtedly would have to come over to this side.

Mr. GREEN. Now, if we propose a countervailing duty—that is, made a general provision similar to what we did with reference to wheat at one time that in case any other country imposes a duty on alcohol exported to that country that same duty should be applied to alcohol imported into this country—would that help any, or would they just take off their duty?

Mr. STILLING. Well, that, of course, is impossible to state. They probably would reduce it because it is higher than they need for their protection, but we are asking just exactly the same duty coming this way that they have on shipments going the other way.

Mr. OLDFIELD. What you want is an equal chance?

Mr. STILLING. We want to be put on an equal basis as to the dumping clause.

Mr. GREEN. Is there any other country that would possibly export to our country except Canada?

Mr. STILLING. No. Of course, the European countries do manufacture wood alcohol, but they use more wood chemicals than they manufacture.

Mr. GREEN. Their costs are higher?

Mr. STILLING. Their costs are higher in production, and as a general thing they use more than they produce.

Mr. LONGWORTH. Wood alcohol is made out of hardwood?

Mr. STILLING. Yes, sir; it is made out of maple, beech, birch.

Mr. LONGWORTH. You do not use any of those woods, none of those woods are produced down here?

Mr. STILLING. I do not believe we use them for pulp purposes. I do not think so. We do not have them imported anyway.

We are going to have a surplus in the near future. This country is their natural outlet for it. On account of the slowing down of business conditions in this country, our storage capacity is exhausted, and it will be impossible for us to take anymore than a very limited amount, and then the natural thing will be for them to ship their alcohol to this country and it will come in competition with ours, of course.

Mr. GARNER. How much do you manufacture?

Mr. STILLING. During the last year we have sold refined goods in the neighborhood of 5,500,000 gallons.

Mr. GARNER. What is the consumption in this country?

Mr. STILLING. Well, the total production in the country, I believe, is around 8 million or 9 million gallons. That is the capacity. But, of course, the plants never have worked to full capacity.

Mr. GARNER. What is the principal use for it?

Mr STILLING. Its principle use at the present time is in the manufacture of formaldehyde. It is the base of formaldehyde.

Mr. GARNER. Your company produces a very large percentage of the wood alcohol used in this country?

Mr. STILLING. Yes; we refine more than half of the wood alcohol that is refined in this country.

Mr. GARNER. And you took upon yourselves the burden of sustaining the entire market by buying a quarter of a million gallons?

Mr. STILLING. Yes.

Mr. GARNER. And you now have your storage capacity filled?

Mr. STILLING. Almost so.

Mr. GARNER. Did any of your associates assist you in taking care of the market?

Mr. STILLING. No; the Wood Products Co., on account of its size, usually carries the burden in cases like that. The remainder of the industry is split 10 ways.

Mr. GARNER. You can really fix the price of wood alcohol?

Mr. STILLING. No; we don't fix the price.

Mr. GARNER. Well, buying a quarter of a million gallons alone at a time from Canada in order to sustain prices would really have a very potential influence in the fixing of prices.

Mr. STILLING. Well, a quarter of a million gallons is not such a very large purchase for my firm. It is nothing unusual for us to

receive three-quarters of a million gallons at one time. We have received this over a period of four months.

Mr. GARNER. But you did buy it to keep the market from breaking, and you have bought until you have filled up your storage tanks in order to stabilize the market?

Mr. STILLING. To be perfectly frank with you, we did not anticipate that there was going to be a complete cessation of industry in this country, and we did not know that on the 1st of January we were going to have 98 per cent of that alcohol in our tanks, or we might not have been in the market for it.

Mr. GARNER. You needed to take that over to stabilize the market.

Mr. STILLING. I think we would have put a limit upon it, and the other fellows would have had to help us out.

Mr. HULL. Do you know whether there is any charcoal imported into this country or not?

Mr. STILLING. I think not.

Mr. HULL. That is a small business; that is, there is not much demand for charcoal.

Mr. STILLING. I am not interested. We are refiners of wood alcohol.

BROMIDES AND BROMINE.

[Paragraphs 5 and 433.]

JAMES T. PARDEE, VICE PRESIDENT OF THE DOW CHEMICAL CO., MIDLAND, MICH.

The CHAIRMAN. You represent the Dow Chemical Co., of Midland, Mich.?

Mr. PARDEE. Yes, on bromides and bromine. The present rate on bromides is 15 per cent ad valorem, bromine being on the free list.

The CHAIRMAN. What paragraph?

Mr. PARDEE. Paragraph 5 for bromides under the general basket clause, paragraph 433, for bromine. The suggested rate is 7 cents per pound plus 30 per cent ad valorem.

Mr. HULL. How much of an increase is that?

Mr. PARDEE. On bromine, which is now on the free list, it is an increase of 7 cents a pound, plus 30 per cent ad valorem, and on bromides over 7 cents—7 cents and 15 per cent.

Mr. HULL. What ad valorem is effective there?

Mr. PARDEE. About 35 per cent. That is a quick calculation.

In the production of bromine and bromides Germany ranks first, and the United States second.

Bromides are used principally in photography and medicine.

Bromine is used in manufacturing bromine compounds or bromides, also certain dyes, and during the World War was largely used in gas warfare.

It is absolutely essential for the manufacture of every known tear gas.

During the war England, France, and Italy were almost entirely dependent on the United States for bromine and bromides, and they purchased large quantities from this country.

How Germany tried to shut off the supply of bromine to the allied countries is shown in Dr. Bernstorff's book, just issued, Three Years

in America. Near the bottom of page 96 he states that they bought up all the available bromine in the United States, so that it could not be used for the manufacture of gases. And again, in Mr. Francis P. Garvan's address, The German Menace (published by the Chemical Foundation), where he quotes Dr. Albert in his praise of Dr. Hugo Schweitzer, former president of the Bayer Co., as follows:

Of still greater and more beneficial effect is the support which you have afforded to the purchase of bromine. We have a well-founded hope that, with the exclusion of perhaps small quantities, we shall be in position to buy up the total production of the country. Bromine, together with chlorine, is used in making nitric gases, which are of such great importance in trench warfare. Without bromine these nitric gases are of slight effect; in connection with bromine they are of terrible effect. Bromine is produced only in the United States and Germany. While, therefore, the material is on hand in satisfactory quantities for the Germans, the Allies are entirely dependent upon importation from America.

Bromine can be made from bromides. The normal use of bromides in medicines and photography is very much less than might be required for war use. It would require fully a year to materially increase the production of bromine. On account of the great importance of bromine in case of war it would seem, therefore, that this industry should be amply protected. We therefore ask for a duty of 7 cents per pound plus 30 per cent ad valorem for both bromine and bromides.

Mr. GARNER. Are the rates in the so-called Longworth bill, passed here and now pending in the Senate, satisfactory?

Mr. PARDEE. It is not included in the Longworth bill. On chloroform and carbon tetrachloride the present rates are as follows: on chloroform, 2 cents per pound, and on carbon tetrachloride, 1 cent per pound. The suggested rates are for chloroform 33⅓ per cent as valorem and for carbon tetrachloride 2½ cents per pound plus 15 per cent ad valorem.

Mr. HULL. How much ad valorem increase is that over the present rate?

Mr. PARDEE. About 25 per cent increase on chloroform and quite a material increase on tetrachloride. If you will allow me to read the brief, I will bring out very emphatically why this increase should be allowed. It is on the preparedness program entirely, for war purposes.

Mr. OLDFIELD. Is that an increase over the Payne-Aldrich law?

Mr. PARDEE. On chloroform the Payne-Aldrich law provided for 10 cents a pound, and we are asking for 33⅓ per cent ad valorem, which would be an increase of 3 or 4 cents a pound over the Payne-Aldrich law.

Mr. HULL. I would suggest that if each witness would state the ad valorem increase, it would save interruption.

Mr. CHAIRMAN. You may do that in order to avoid questions, show what your increases are, as compared with the rates in the Underwood and Payne-Aldrich tariff laws.

Mr. GREEN. I do not see the necessity for that. It is a mere matter of computation. We have it right before us.

Mr. LONGWORTH. Why are you advocating an ad valorem duty rather than a specific duty?

Mr. PARDEE. I have no specific reason. I prefer a specific duty if it is agreeable to the committee.

Mr. LONGWORTH. I noticed that one of the witnesses preceding you also advocated an ad valorem on chloroform, and I wanted to know if there was any real reason for it.

Mr. PARDEE. No; I think not.

The CHAIRMAN. It does not vary in price?

Mr. PARDEE. To a slight extent.

The CHAIRMAN. Then a specific duty should be placed upon it instead of an ad valorem.

Mr. PARDEE. Chloroform is used as an anesthetic. Carbon tetrachloride is used as a solvent, a cleanser, and as raw material in the manufacture of chloroform, that is, in our process. We are the only ones in the United States who use that process for the making of chloroform from tetrachloride. That is not right either. We were for a number of years, but I think there are a number of other makers down near Charlestown who use the same process. It is also used, with technical chloroform, in fire extinguishers. It is stated that during the war it was largely used in producing smoke screens. The Government took over large quantities and controlled the sale and distribution of all the production in this country. Absolutely, so far as we were concerned, and I believe every other maker of carbon tetrachloride, the Government directed just how we should distribute our products, taking over a large quantity of it. Previous to the war importations in large quantities were made from Germany.

Chloroform and carbon tetrachloride both require chlorine for their manufacture. The principal reason for asking for an increased duty on these products is in order to stimulate the production of chlorine in the United States.

Chlorine is one of the principal ingredients of poison gases. It is an important factor in making mustard gas. Soon after the United States entered the war an experimental plant was started on our premises in Midland under the direction of one of the officers of our company, an expert chemist, to develop a process for the manufacture of mustard gas. The fact that we had a large production of chlorine with buildings and equipment available, together with men having the necessary technical training and experience, made it possible to produce the first mustard gas manufactured in this country. Ours was the only plant in the country where mustard gas was made outside of Edgewood Arsenal.

The importance of chlorine in modern warfare makes it most imperative that the United States should have an abundant capacity for its production, and this can be done only by stimulating the manufacture of those chemical compounds into which chlorine enters as an important constituent.

With the capacity for the production of chlorine in large quantities thus established it will be available immediately in case of war for such purposes as may be required.

We have asked for a duty of 33⅓ per cent ad valorem on chloroform with the expectation that some provision will be made in the administration of the same to provide for the great difference in exchange rates between this country and foreign countries. If, however, it is found impossible or unfeasible to make such provision we ask that a specific duty of 7 cents per pound be levied on chloroform in addition to 33⅓ per cent ad valorem.

Mr. GREEN. There are practically no importations either of carbon tetrachloride or chloroform at the present time, are there?

Mr. PARDEE. Carbon tetrachloride was shut off during the war, but a few years before, I believe the report would show some importations.

Mr. GREEN. Our last figures, which I think are up to the middle of 1920, do not show any importations of carbon tetrachloride.

Mr. PARDEE. It is not really a question of importations, it is not really a question of competition on those particular articles, chloroform or carbon tetrachloride; it is for the purpose of providing a way of using chlorine. We can not make chlorine in this country if we have no use for it. You have got to have chlorine if war comes on.

Mr. GARNER. Let me ask Mr. Longworth why it was that chlorine was not included in the bill he prepared?

Mr. LONGWORTH. It was not a coal-tar product.

Mr. GARNER. You only dealt with coal-tar products?

Mr. LONGWORTH. Yes.

The CHAIRMAN. What is the original raw material from which these products are produced?

Mr. PARDEE. The original raw material is salt brine pumped from the ground.

The CHAIRMAN. Mr. Dow's chemicals are all made from salt brine, are they not?

Mr. PARDEE. The large bulk. During the war we got into some organic chemical business and we are getting into the dye business now.

Mr. RAINEY. Have we as much salt brine in this continent as they have over there?

Mr. PARDEE. In Germany they go down into the ground and dig salt as we dig coal in this country. They have mines a quarter of a mile deep, where they get this salt.

Mr. RAINEY. Then, ultimately, your proposition resolves itself into a higher tariff on salt.

Mr. PARDEE. No, sir; salt itself does not enter into it. Our brine does contain bromine, but the bromine part of it, I think, does not exist in all parts of the country. We have many salt beds where the percentage of bromine is so slight that it would be impossible to manufacture. In Midland we have to pump 700 pounds of salt brine to get out 1 pound of bromine.

The CHAIRMAN. The real salt content in the brine is from 48 per cent to 65 per cent, or as high as 90 per cent.

Mr. PARDEE. It varies greatly. In fact, we never undertook to produce salt itself until within the last two or three years.

May I have the privilege of submitting briefs on other products later?

The CHAIRMAN. Yes, sir; hand them to the clerk.

Mr. RAINEY. Will you tell me exactly why you want a tariff? What do you want protection for?

Mr. PARDEE. In order that this country can produce bromine and chlorine in sufficient quantities and have them ready in case of war, so that we can divert them for war purposes.

Mr. RAINEY. Your proposition is to get ready for another war as fast as you can.

Mr. PARDEE. To be ready for it at any time.

Mr. RAINEY. What do you want a tariff on?

Mr. PARDEE. Bromine, bromide, chloroform, and carbon tetrachloride.

Mr. RAINEY. You want a tariff on those articles in order that we can get ready for another war in the future?

Mr. PARDEE. Aside from that, the business is established and plants erected. We had during the war 2,200 men employed.

Mr. RAINEY. Your business was a war industry?

Mr. PARDEE. No, sir; we have been in existence since 1897.

Mr. RAINEY. Did you have 2,200 men employed in 1897?

Mr. PARDEE. No, sir; I said during the war.

Mr. RAINEY. You want to have this tariff high enough so that you can keep on maintaining your war industry in times of peace?

Mr. PARDEE. No, sir; we do not maintain our war production at the present time. We make carbon tetrachloride by the millions of pounds per year.

The CHAIRMAN. Let me make a very brief statement to the committee in order to relieve this situation. Mr. Dow, whom I know very well, told me personally that he began the sale of bromine in Europe at one time and found a good market there for it, but the competition was keen and the profits low.

Mr. PARDEE. Caused by German dumping.

The CHAIRMAN. He continued the sale of this article in Europe, and one day a German gentleman called at his office at Midland and informed Mr. Dow that he, the German, represented the German industry, and he said, "I have come here to tell you to do one of two things, get out of Europe or we will put you out of business in the United States. We have in Germany what we call a yellow-dog fund, to which the manufacturer contributes one half of the money, and the German Government gives the other half, and we have $25,000,000 in that fund, and we will put you out of business in the United States if you do not get out of Europe." Mr. Dow told him to go home and do his best. In a few weeks afterwards the price of bromine dropped down in this country 10 cents a pound below its cost of production, or something like that—I have forgotten the exact figure.

Mr. PARDEE. That is substantially correct.

The CHAIRMAN. But Mr. Dow continued selling in Europe at a profit for 3 years and 10 months, and finally the Germans declared the war off.

That is the history of the necessity for protection to the Dow Chemical Co. in the State of Michigan.

Mr. GARNER. Have they that yellow-dog fund in Germany now?

Mr. PARDEE. If they have not, they soon will have.

Mr. RAINEY. Let me get some more light on the subject. The Dow Chemical Co. was engaged in a war industry, employing 2,200 men during the war, but if we get into an association of nations which will bring about disarmament, there will be no necessity for this tariff, will there?

Mr. PARDEE. Certainly there will be.

Mr. LONGWORTH. Let me state that the gentlemen on that side of the committee voted solidly recently to spend $10,000,000 to build a plant at a place called Muscle Shoals, in order to be prepared for war four years from now.

Mr. GARNER. That is not correct. We voted to establish that plant, but for different reasons than the gentleman stated.

Mr. RAINEY. We voted for it in order to make it possible for the farmers to have fertilizer and produce cheaper foodstuffs.

Mr. PARDEE. The Dow Chemical Co. is not engaged in a war industry.

BRIEF OF EDGAR ERVIN, POMEROY, OHIO.

[Urging an amendment to H. R. 8078, Sixty-sixth Congress, second session.]

This brief is submitted (1) as an argument for the insertion of the dyestuff bill now pending in the United States Senate and (2) as an argument for the insertion of bromine in the tariff bill before the Committee on Ways and Means under Schedule A.

USES OF BROMINE.

1. Bromine is used in the manufacture of bromides, potassium, sodium, and ammonia for medicine and photography. For making bromide nerve restoratives, over 500 in number, of which every wounded soldier must become a user.
2. For the manufacture of coal-tar colors, Eosine and Hoffman blue.
3. As a chemical reagent.
4. As a disinfectant when dissolved in water.
5. For the bromo-cyanide process of gold extraction.
6. In photography and motion-picture films.
7. It was extensively used in gas warfare. It is absolutely essential for the manufacture of every known "tear gas." Germany scored heavily on the Allies in gas warfare and one particular reason is recited in Dr. Bernstorff's book just issued "Three Years in America." Near the bottom of page 96 he states that the Germans bought up all the available bromine in the United States so that it could not be used for the manufacture of gases.

Bromine together with chlorine is used in making nitric gases which are of such great importance in trench warfare. Without bromine the nitric gases are of slight effect; in connection with bromine they are of terrible effect. Bromine is produced only in the United States and Germany.

Bromine should be included in the dyestuffs bill now pending in the Senate (1) for the reason that it should be subject to section 504 of said act, thereby protecting the manufacture of bromine without any particular tariff; (2) for the reason that unless some protection is given, this industry must necessarily languish and the unpreparedness of the United States will be paralleled should future wars occur; (3) as an act of public defense the bromine industry comprises principally the basis of the war-gas products and this industry should be protected as a means of public defense.

SOURCES OF SUPPLY AND PRODUCTION COSTS IN THE UNITED STATES.

The United States and Germany are the only two nations producing bromine. Only four States of the United States produce bromine—Ohio, Michigan, West Virginia, and New York.

Bromine in the United States is produced chiefly as a by-product of brine salt and is never found alone in nature. Being produced as a by-product it is very difficult to get the exact production cost, owing to the difficulty and great diversity in bookkeeping in distributing the proportionate costs to each manufactured article. At the present time production costs per pound of bromine in the United States approximate from 0.35 to 0.40 cent. In Germany, in the city of Hamburg, bromine is selling in large quantities at the rate of 0.12 cent per pound. When imported to New York the cost approaches 0.20 cent per pound.

REASONS WHY BROMINE SHOULD BE SUBJECT TO SECTION 504.

Excluding the tariff argument, inasmuch as the production of bromine in the United States is slightly in excess of the consumption, in the same territory, a tariff on bromine would not be burdensome and if the importation of bromine was restricted according to section 504 for the period of three years, it would give sufficient time for the bromine industry to readjust itself on a permanent basis. In other words, the law of supply and demand in the United States would regulate the price of bromine reasonably well if the foreign bromine or German bromine is excluded. The United States is not discriminating against any foreign nation except Germany in the exclusion of bromine and is not discriminating against the domestic users of this product and its derivatives.

PRODUCTION OF BROMINE IN THE UNITED STATES.

Studying the reports of the Department of the Interior, the United States Geological Survey from the year 1916 to the present time, the following observations are made: On page 219 of the report for the year 1916, published in September, 1917, the prewar

price of 0.35 cent per pound. This rose to $1 in 1915, and to $1.34 in 1916, and the production was increased to 922,225 pounds. On page 220 of said report it is quoted "The price of bromine in New York during the first half of 1916 ranged from $4.75 to $6.50 per pound as a result, at least in part, of the unprecedented demand from abroad. These prices include cost of transportation and dealers' profit. In March, 1917, the price of bromine in New York had fallen to $1.30 per pound."

SUMMARY.

The proposed duty should be laid for the following reasons:

1. As a means of continuing this industry for the protection of the national defense, it being a very important munition of war and being the destructive agent and constituent in practically all of the poison or toxic gases.

2. For the reason the industry can be developed only where this article is found, and can scarcely exist without a duty on the importation from Germany, and no foreign nation is discriminated against save Germany alone.

3. A duty on bromine would not add an increased price per pound to the local consumers because our supply is in excess of the demand.

RATIO OF TRANSPORTATION COST TO MANUFACTURING COST.

The transportation cost of Germany in importing bromine to the United States by reason of the bulk of the bromine is very inconsiderate as compared with the transportation cost of other chemicals. As above stated, bromine is not found alone in nature, always being connected with some other material. For instance, the brine from which this bromine is produced produces salt and other chemicals, and for each barrel of salt manufactured one-half pound of bromine is manufactured. The comparison in price of a pound of bromine with a barrel of salt with respect to present market prices is about the ratio of 1 to 5; the comparison in bulk is about the ratio 1 to 360. The item of relation between bulk and value has a particular significance, especially in the transportation of a large amount of material across the Atlantic.

RELIEF SUGGESTIONS.

It is suggested that relief can be had to the manufacturers of bromine in a very practical and immediate manner by inserting an amendment to the Longworgh dye stuffs bill under schedule C or the chemical schedule in said bill, which said bill, we are advised has passed the House September 26, 1919, and is now pending in the Senate. If this is true, if amended in the Senate the House would doubtless concur or failing to concur a conference committee report could be had on same.

Of course, the tariff on bromine could probably be inserted in any general tariff bill or the one onw pending before the Committee on Ways and Means and inserted under schedule A, being chemicals, oils, and paints. The above argument has been presented in such a way that it will apply either to the dyestuffs bill or to the general tariff bill, the former having passed the House and now pending in the Senate and the latter now being considered by the House Ways and Means Committee.

PHOSPHORIC ACID.

[Paragraph 387.]

BRIEF OF THE PHOSPHORUS COMPOUNDS CO.

GENTLEMEN: We respectfully submit that, in any tariff legislation that may be enacted by Congress—

Phosphoric acid "pure," now "free" under paragraph 337 of the customs tariff act of 1913, should be made dutiable at the rate of 25 per cent ad valorem, or at whatever rate may be fixed for other chemicals, "not provided for," as under schedule A, paragraph 5, of the present tariff.

In substantiation of our claim we submit:

Phosphoric acid is produced in an impure, diluted state by the burning of phosphorus in a current of air and absorbing the gaseous phosphorous and phosphoric acids formed in distilled water. This process is carried on in large chambers constructed of sheet lead, all seams being made by fusion with oxy-hydrogen blowpipe. These chambers are necessarily very expensive and, due to the corrosive nature of the acids, require frequent repairs and have to be entirely replaced within short periods.

Large earthenware apparatus are required for condensing and for chemical treat-

ment to remove the impurities, and for storage of the acid. The concentration of the weak acid to the required specific gravities, 1.710 and 1.750, is conducted in porcelain or silica evaporating dishes. The earthenware and porcelainware were formerly imported at a low cost. We are now obtaining these articles from American manufacturers of a quality inferior to the imported and at comparatively very high prices.

The principal material used is phosphorus. During the war period the foreign manufacturers increased their production of phosphorus many fold to meet the requirements for war purposes. As a result there is now a large overproduction and an accumulation of vast stocks from which the English, French, Swiss, and German manufacturers are being supplied at such low prices as to give them a very decided advantage.

Earthenware, under paragraph 78, is now dutiable at 15 per cent ad valorem.

Porcelainware, under paragraph 80, pays a duty of 50 per cent.

Sheet lead, under paragraph 153, is dutiable at the rate of 25 per cent ad valorem.

The lead burners, skilled laborers and chemists we are employing are paid much higher wages and salaries than paid in foreign countries. Other materials entering into the construction of a manufacturing plant also pay a duty under the present tariff.

In order to meet the heavy demand caused by the cutting off of all imports, we greatly enlarged out plant for the manufacture of phosphoric acid during the war period at a very heavy expense. If the importation of the foreign acid, free of duty, is permitted to continue, we will certainly have to shut down part, if not all, of our works, allowing the foreign acid to replace our manufacture to that extent.

There never was any justifiable reason for singling out "pure" phosphoric acid and placing it on the free list. We can only attribute this action to the fact that, at the time of the earlier tariff revisions, "pure" phosphoric acid was not manufactured in this country and the members of the Ways and Means Committee probably had in mind "crude" phosphoric acid.

In the tariff revision of 1913 the Senate Ways and Means Committee placed a duty of 15 per cent on phosphoric acid, which, however, was afterwards taken off in debate in the House on the request of a Southern Representative on the erroneous claim that the acid was used for fertilizing purposes.

We claim that "pure" phosphoric acid is an officinal United States Pharmacopœia medicinal preparation and, therefore, entitled to the same protection accorded other medicinal chemicals and should properly be included in a general schedule covering "Chemicals and chemical preparations not otherwise provided for," as, under A, paragraph 5, of the present tariff.

We claim that it would be unfair to continue "pure" phosphoric acid on the free list, that no exception should be made in the case of this article and that, as long as the principle of protection prevails and countervailing duties are imposed to equalize the difference in cost of production in this country as compared with foreign countries, the same rule should be applied to "pure" phosphoric acid and a reasonable ad valorem duty imposed on the article. We claim that a distinction should be made between "pure" phosphoric acid, a medicinal article, and "crude" phosphoric acid, a cheap article made from bones or phosphate rock and used largely for technical manufacturing purposes.

EDW. MALLINCKRODT, *President.*

CYANIDE SALTS.

[Paragraph 580.]

P. SAMUEL RIGNEY, ASSISTANT TREASURER OF THE ROESSLER & HASSLACHER CHEMICAL CO., NEW YORK CITY.

Mr. RIGNEY. Our company is the premier manufacturer of cyanide salts in this country, and we are to-day the only manufacturer of cyanide salts in commercial quantities. We are asking that cyanide salts and their compounds and mixtures be placed in a separate paragraph and be made dutiable at 33⅓ per cent ad valorem. Now, that may seem a rather excessive request, but under the circumstances we believe we are justified in making such request.

Mr. GARNER. A curious thought comes to me since you have made that remark. It is a significant thing to me that each of you have selected 33⅓ per cent ad valorem as equaling the difference in cost

of production here and abroad. Is there any concerted action between you gentlemen who are interested in the chemical schedule to select 33⅓ per cent as the universal rate for those things?

Mr. RIGNEY. We are all competent to figure our own percentage.

Mr. GARNER. And you figured them, and all came to the same conclusion?

Mr. RIGNEY. I beg pardon; I have another commodity in which I am more modest and am asking for a lesser per cent.

Mr. GARNER. But I am struck with this peculiarity that you all ask for 33⅓ per cent.

Mr. RIGNEY. Well, it is easy to figure.

Prior to 1897 our company manufactured potassium cyanide; when the duty on potassium cyanide was reduced from 25 per cent to 12½ per cent ad valorem, we were obliged to discontinue the manufacture of that product. Later on we took up, in 1902, the manufacture of sodium cyanide under a process invented by Mr. Hamilton Y. Castner, an American citizen, which process we have developed, and it is now in a high degree of perfection.

Mr. GREEN. Potassium cyanide, what is the common name for that?

Mr. RIGNEY. Potash cyanide. You will find that under the Payne-Aldrich Act in paragraph 64.

Mr. LONGWORTH. What are your raw materials?

Mr. RIGNEY. I am very pleased that you have asked the question. The two principal raw materials from which cyanide is made are now dutiable. One is free of duty. Caustic soda, one of the principal ingredients, pays a duty of one-fourth of 1 cent per pound under the present act. Charcoal is free of duty and anhydrous ammonia is dutiable at 2½ cents per pound.

Mr. GREEN. Potassium cyanide is not the same as sodium potassium?

Mr. RIGNEY. Slightly different.

Mr. GREEN. Is it what we sometimes call prussic acid?

Mr. RIGNEY. There is practically none on the market at this time.

Mr. GREEN. Prussic acid and sodium cyanide are about the same?

Mr. RIGNEY. It is simply a carrier for the cyanide, sodium being preferable because it is able to carry a higher per cent than the potash.

When the Payne-Aldrich Tariff Act was passed, the industry was very much encouraged in this country, because of the fact that under that act sodium cyanide was dutiable at 25 per cent ad valorem, and under that protection the industry forged ahead and was almost in a position to meet foreign competition on an equal footing, but when the present tariff act was passed and this commodity put on the free list the industry received a very serious setback. Had not it been for the intervention of the war it is very hard for us to say just what would have become of the cyanide industry in this country.

Mr. OLDFIELD. Now you want to increase that?

Mr. RIGNEY. Yes, sir. As an illustration of the competition from foreign sources, statistics show that in the year ending June 30, 1914, Germany sent into this country 8,000,000 pounds of cyanide, while our production during the same period amounted to approximately 13,000,000 pounds. Of course, within a year after that it was impossible to import cyanide to this country and a shortage developed

in 1916. We tried to meet that shortage by increasing our manufacturing facilities at Niagara Falls, N. Y., where our manufacturing plant is situated, but we were met there with a condition which was very unsatisfactory and over which we had no control. The power there—the electric energy—was diverted to the manufacture of munitions of war for the Allies at that time. A part of our plant was rendered useless. We tried to remedy that by building a new plant at Perth Amboy, N. J., where we had a contract to get our power from the Public Service Co. of New Jersey. That was in May, 1917. We had our plant thoroughly equipped when the power was reduced there and we were obliged to shut down that plant in 1918.

A great many of the war industries required cyanide in their operations. Ours was the only source from which that cyanide could be obtained in this country. Regardless of that fact we never asked for any assistance from the Government and none was ever volunteered. But we were able to meet the emergency and did so without materially increasing the cost of the product to the domestic users and to the war industries.

We did have some opposition, however, from the Government, which did not result seriously. The Government attempted to develop processes of manufacturing sodium cyanide at Saltville, Va., and we are advised that several millions of dollars were expended in that plant and the results were nil. Our present information is that that plant has been scrapped.

Mr. GREEN. Where is that?

Mr. RIGNEY. Saltville, Va.

Mr. GREEN. They never completed it?

Mr. RIGNEY. No; I think not entirely completed, but if we had had one-quarter of the money spent on that plant we would have been able to develop wonderfully, although we did fill all requirements.

Mr. GREEN. Your process is entirely different from that?

Mr. RIGNEY. Entirely different, but the same result.

The CHAIRMAN. Then that money was wasted?

Mr. RIGNEY. It was, so far as we are concerned.

The CHAIRMAN. How about the rest of us?

Mr. RIGNEY. I think all the taxpayers are in the same position.

Mr. GREEN. It was wasted if it was not carried to completion?

Mr. RIGNEY. Yes, sir.

Mr. RAINEY. They quit production on account of the ending of the war?

Mr. RIGNEY. I think not. I don't think they got to producing much.

Mr. CARNER. I thought you told Mr. Green they never completed the plant?

Mr. RIGNEY. Not entirely, but they had it in operation.

Mr. GREEN. I think not at Saltville.

Mr. RIGNEY. I am not positive on that, but that is my information.

Mr. GREEN. That was the Bucher process.

Mr. RIGNEY. A nitrogen fixation process.

Mr. GREEN. They have a number of different plants. The plant at Muscle Shoals made some nitrate, but I don't think the one at Saltville ever got to completion.

Mr. RIGNEY. My information is that the Saltville plant started out to develop the Bucher process which is entirely different from the process we use and different from that at Muscle Shoals.

Mr. GREEN. I think not. I have all of that covered in a work on chemistry, and they say the Bucher process was used there.

Mr. RIGNEY. I am not going to dispute a printed record.

Mr. GREEN. I find my recollection is at fault in saying that potassium cyanide is sometimes called prussic acid. I find it is hydrocyanic acid

Mr. RIGNEY. Yes; that might be.

Mr. GREEN. It is a deadly poison, so deadly that a freshman student said a drop on the tongue of a dog would kill a man.

Mr. RIGNEY. That is not applied to our sodium cyanide.

Mr. GREEN. Are you sure of that?

Mr. RIGNEY. Yes, sir.

Mr. GARNER. As I understood you a while ago, under the Payne-Aldrich bill you built up an industry in this country and were able under the Payne-Aldrich law——

Mr. RIGNEY (interposing). Yes, sir.

Mr. GARNER. You had 25 per cent ad valorem?

Mr. RIGNEY. Yes, sir.

Mr. GARNER. And now you think it will take 33⅓ per cent to build up the same industry?

Mr. RIGNEY. We do, for the reason that there is now a vast difference in the labor and material costs from the time in which the Payne-Aldrich law was in operation.

To show that the competition from the foreign market is being revived, the incomplete statistics at this time show that during the first nine months of the year 1920 approximately 6,500,000 pounds of cyanide of various grades have been shipped into this country and the average declared price was 17½ cents per pound. That is partly German competition and partly competition developed in Canada.

Mr. COPLEY. You were referring a moment ago to the lesser rates of duty under which you were getting along and that you now require more. Is it not a fact that the great bulk of your competition came from Germany and England?

Mr. RIGNEY. Principally from Germany; but now competition has developed in Canada which is very serious.

Mr. COPLEY. Now, prior to the outbreak of the war, the actual gold wage of the German workman and the American workman was very much nearer together than they are to-day?

Mr. RIGNEY. Yes; that is true.

Mr. COPLEY. So if you are going to cover the difference in cost of production as it is in Germany to-day you have to have a bigger per cent than you did in 1913?

Mr. RIGNEY. Yes; that is the premise on which our application is based.

Mr. GARNER. What is the difference between the cost of your production and the cost of production in Canada?

Mr. RIGNEY. That is absolutely impossible to answer, because of the fact that the product in Canada is low-grade and an inferior product. They are sending it over here and are trying to make the people believe it is high grade.

Mr. GARNER. Then it is a want of education on the part of the American people as between your product and the Canadian product.

Mr. RIGNEY. That is true, but that would apply to more products than ours.

Mr. GARNER. You do not propose to use the custom house for the purpose of educating the people in that particular?

Mr. RIGNEY. No; but we should have the assistance of some department of the Government to protect us against misrepresentation.

Mr. GARNER. You are going to use the customhouse to preserve you from misrepresentation. This is the first time——

Mr. COPLEY (interposing). You might use a national election to do that.

Mr. GARNER. If you are going to bring in new features to protect you from the difference between the cost in this country and abroad and that one shall be to prevent misrepresentation on the part of the foreigner in selling his goods to the American people I do not know how far you could go.

Mr. RIGNEY. There is another feature in the matter. The raw material used in Canada is a much cheaper grade than the raw material we produce from.

Mr. GARNER. So it makes an inferior article?

Mr. RIGNEY. It makes an inferior article, of course, but even though they were to succeed in bringing it to a point where they could bring out the same sodium content that ours has, still they have a certain cheaper raw material in Canada than ours is here.

Mr. GARNER. What is the duty on the raw material they are using?

Mr. RIGNEY. That is without duty at this time.

Mr. GARNER. Do you get the same raw material?

Mr. RIGNEY. It is of another manufacture; whether we could acquire that I do not know.

Mr. GARNER. But if you had an equal opportunity to get the raw material product could you make it as cheap as they do in Canada?

Mr. RIGNEY. No.

Mr. GARNER. Why?

Mr. RIGNEY. In the first place the power in Canada is not much more than half the price it is in the United States. The Canadian power, on the Canadian side of the river, is much cheaper than on the New York side of the river.

Mr. GARNER. Why is that?

Mr. RIGNEY. I don't know, I do know it is true.

Mr. GARNER. Each country has control of the power at Niagara Falls; Canada has control of its power, and the United States has control of its power. If that is true, then the remedy would be legislation to make the power as cheap in this country as cheap as in Canada. What I want to ascertain—I have heard a number say they were afraid of Canadian competition—and I wanted to find out from you, or some one, what the labor conditions were in Canada, and why they could manufacture things so much cheaper than we can in this country.

Mr. RIGNEY. We are striving now to make a labor cost comparison between that country and the United States.

Mr. GARNER. You do not think it would equal 33⅓ per cent?

Mr. RIGNEY. That I am not prepared to say.

Mr. OLDFIELD. How long has that Canadian competition bothered you?

Mr. RIGNEY. Since the war. I understand—I am saying this from hearsay, and I can not say it is true—but I understand that this competition is coming from a corporation that received assistance from the United States Government in the production of a different material that was necessary in the prosecution of the war, and now, since the war is over, they are using some of their funds to build up an industry in Canada.

Mr. OLDFIELD. How long have you been in the business?

Mr. RIGNEY. Since 1893 or 1894, but in 1902 we took up the manufacture of sodium cyanide.

Mr. COPLEY. Let us see if we can not clear up the question you were asked. You say the Canadian cyanide is inferior in quality?

Mr. RIGNEY. Yes, sir.

Mr. COPLEY. There is always a large percentage, or a considerable percentage, of buyers that will buy a product if they can get it a little cheaper. Do you not find that true in your business?

Mr. RIGNEY. Absolutely so.

Mr. COPLEY. And, of course, these people who buy cheaper, it is not any better for them, and perhaps not so economical, but nevertheless it cuts out your product and makes, of course, the production much more expensive for the rest of the customers you serve?

Mr. RIGNEY. That has been brought home to us in the last month.

Mr. COPLEY. That is what I wanted to bring out.

Mr. RIGNEY. I don't know whether the committee desires to hear anything further in connection with this Canadian manufacturer. but there was an article printed in the Drug and Chemical Markets, being a reprint from the London Chemical Age, and I will simply read one paragraph to show the position they have taken:

The demands for these improved products have recently become so great that additional equipment is now going into operation in the plant at Niagara Falls, to assist in meeting a demand of nearly 30,000,000 pounds of sodium cyanide (calculated as 100 per cent) for the year 1920.

So that I feel that I am justified in saying that this is a very active and serious competition, and one against which we should have a reasonable measure of protection.

BRIEF OF ROESSLER & HASSLACHER CHEMICAL CO., NEW YORK CITY.

SIR: In revising the tariff we respectfully petition that since the classification of the imports is as important as the rates of duty which are to be established, all commercial cyanide salts and cyanide mixtures, combinations, and compounds containing cyanide be included under a new paragraph, and that the duty on all cyanides and all mixtures, combinations, and compounds containing cyanide be fixed at 33⅓ per cent ad valorem.

Theoretically 100 per cent potassium cyanide contains 40 per cent cyanogen, 100 per cent sodium cyanide equivalent to 132½ per cent potassium cyanide, 53 per cent cyanogen. The available cyanogen in both salts being the valuable active constituent of the cyanide, while the potassium, sodium, and other ingredients simply act as vehicles for the cyanogen. Sodium in comparison with potassium is the stronger of the two salts, in that it is capable of carrying a higher percentage of cyanogen. The distinction between these two cyanides has been recognized and definitely fixed by General Appraisers' decision, T. D. 326801, Abstract 28108, June 27, 1912.

POTASSIUM CYANIDE.

Under the present tariff act potassium cyanide and its mixtures are duty free, paragraph 580, while under the Payne-Aldrich Act of 1909 the duty was 12½ per cent ad valorem under paragraph 64.

If the industry is to be encouraged in this country, it is absolutely necessary that a substantial duty be placed thereon. This duty will not only encourage American industry but will produce a substantial revenue to the Government in the meantime. During the year ending June 30, 1914, there was imported 1,236,799 pounds of this material the value of which was $183,259. At the proposed rate of duty, this amount would yield a revenue of $61,086.34.

SODIUM CYANIDE.

Sodium cyanide, under the present tariff act, is duty free under paragraph 605, while under the Payne-Aldrich Tariff Act of 1909, this commodity was considered a chemical compound and under paragraph 3, paid a duty of 25 per cent ad valorem.

The manufacture of sodium cyanide in this country began in 1902 and has increased from 526,463 pounds in 1902 to approximately 16,500,000 in 1919. This substantial increase was made possible by the protection afforded by the Payne-Aldrich Tariff Act, 1909, and artificial protection caused by the World War.

For a number of years sodium cyanide was used principally for the extraction of precious metals from ores and tailings and for generating hydrocyanic-acid gas, the best means of controlling scale-insects on citrus fruit trees. The use of sodium cyanide and its mixtures in the heat treating of steel and electroplating has been so developed by the experts of this company that the amount used in the various industries is far in excess of the amount used for extracting ores and fumigating purposes combined.

In 1910 approximately 2,000 tons were used in mining; 1,200 tons in fumigation, and 1,300 tons in various industries, while in 1919 about 1,200 tons were used in mining, 1,000 tons for fumigation, and slightly over 3,000 tons in various industries.

Under the protection afforded by the World War, the American manufacturer was enabled to build up a substantial export business in sodium cyanide. In 1916 approximately 1,700 tons were exported, while in 1919 that amount was increased to over 3,300 tons.

During the past five years the manufacture of sodium cyanide has become one of the more important domestic industries. The capital invested in this industry in 1919 amounted to $1,125,000 as against $530,000 in 1914. In 1914 only 90 workmen were engaged in this industry, while in 1919 the number was increased to approximately 250.

During the World War many new uses for this commodity were developed through the efforts of experts in the employ of the manufacturer, in conjunction with the experts of various governmental departments. After a conference held at the Bureau of Standards in Washington in 1916, at which the manufacturer's expert was present, zinc cyanide was adopted for use in plating the steel parts used in airplane construction. At present the United States Government used cyanide in solution form for electroplating with zinc the millions of shells that were left over from the late war.

The raw materials used in the manufacture of sodium cyanid are all of American production and are included in the present tariff act, as follows:

Caustic soda, paragraph 67, one-fourth cent per pound.

Charcoal, paragraph 447, duty free.

Ammonia, anhydrous, paragraph 7, 2½ cents per pound.

Gas liquor, paragraph 7, 10 per cent advalorem.

One of the largest items of expense in the equipment used in the manufacture of this commodity is the metal cyanide pots. These are dutiable under the present tariff act, paragraph 127, at 20 per cent ad valorem.

The manufacturing cost of sodium cyanide in the United States has increased over 100 per cent since 1914, the increase in cost of the raw material being practically the same as in the labor cost.

Prior to the war the cost of manufacturing sodium cyanide in Germany was much lower than in the United States. It is, however, impossible to compare the present manufacturing costs abroad with the American costs.

There is every reason to believe, however, that Germany will soon regain her ability to manufacture this particular commodity in large quantities and attempt to regain the markets held by her prior to the World War. During the fiscal year ending June 30, 1914, there was imported 7,856,611 pounds of sodium cyanide, at a value of $1,120,789, all from Germany. At the proposed rate of duty, this amount would yield a revenue of $373,596.34.

During the war the manufacture of a low grade of sodium cyanide, cyanogen contents 23 to 25 per cent, was established in Canada, and the product of this plant shipped

to the United States in competition with the high grade cyanide manufactured in this country. The process of manufacturing cyanide in Canada has since been developed and improved, so that the cyanogen contents of the present product has been somewhat increased. This low grade material is now produced in Canada much cheaper than in the United States, on account of the fact that the nitrogen is obtained from a waste product and because of cheaper power and lower labor cost. If such material is allowed to enter this country free of duty, as at present, it will be a serious menace to this key industry in the United States.

While we would prefer to have a specific duty fixed on all imports, we realize that under the present unusual conditions it is impossible to fix a rate of specific duty that would be equitable.

In order that the tariff may be simplified and the cyanide industry in the United States have the protection necessary for its continued existence, we respectfully renew our request that all cyanides, cyanide mixtures, combinations, and compounds containing cyanide be included under a separate paragraph and that the duty thereon be fixed at 33⅓ per cent ad valorem.

P. SAMUEL RIGNEY, *Assistant Treasurer.*

HYDROSULPHITES AND SULPHOXYLATES.

[Pars. 5, 21, and 144.]

CHARLES S. HOLLANDER, REPRESENTING THE ROHM & HAAS CO. (INC.), PHILADELPHIA, PA.

Mr. HOLLANDER. I am vice president and chemical director of the Rohm & Haas Co. (Inc.), Philadelphia. We also have offices in Chicago, Boston, and Gloversville, N. Y.

Mr. Chairman, the products that we are interested in are sulphoxylates and hydrosulphites, leukotrope, artificial bates, titanium salts, antimony salts, and synthetic tanning materials.

The hydrosulphites and the sulphoxylates are comparatively new articles in our market, because they only started to appear about the year 1906, or 1907, and since then they have become of a great deal of importance and the use of them is steadily increasing.

The importation of all of these hydrosulphites—they are all closely related chemically—was over 1,000,000 pounds in the year 1913—that is, just before the war—and the only manufacturers were the big German dyestuff manufacturers, such as the Badische Anilin and Soda Fabrik, Hoechst, Cassella, and Bayer, etc.

The importance of these articles, hydrosulphites and sulphoxylates, lies in the fact that they are absolutely indispensable for dyeing. They are very important particularly in the dyeing industry, and it means that without the hydrosulphites you could not use the valuable vat dyes to-day, which are so important because fast to washing.

They are also of prime importance and indispensable in the printing of cotton and silk goods. They are also greatly used for bleaching straw for straw hats and in bleaching sugar and molasses, for stripping the color of goods that have been spoiled in the dyeing processes and also in stripping the dyes of shoddy. And in that way they are of some economical importance in the conservation of wool.

One very important use is its employment in the manufacture of salvarsan, or 606, or as it is now known officially, arsphenamine, which is an invaluable remedy for syphilis.

There are other uses of smaller importance, and I wish to impress upon the committee that we are only at the beginning of the opening of these fields.

Now, the condition of the industry at the beginning of the war was this: These important chemicals that are really basic in the manu-

facture of a great many important other things were altogether imported from Germany and made by the large dye-stuff concerns in Germany and nowhere else in the world. They were not manufactured in this country at all. When the war started this country was cut off from its supplies of the hydrosulphites and sulphoxylates and, consequently, the price jumped very quickly from 30 cents per pound to over $3 per pound, and stayed there for a long time.

Now, seeing that situation, our company got busy and by a great effort and spending a large amount of money we finally were able to supply this very much needed article to the American manufacturers.

If we had not been able to do this, the manufacturers of this country would have been very seriously handicapped and especially the health authorities, both civil and military, would have been in a very bad condition, because, as I have already pointed out, they were crying for an adequate supply of arsphenamine, and the only way to make that product is by employing hydrosulphites.

We offered the article to the American manufacturer at $1.25 per pound, which caused the market to break from $3 per pound, the prevailing price until then. And since then we have steadily lowered our price in accordance with the progress we made in the perfection of our process until we finally came to 55 cents per pound. Now, since the trading relations have been partially resumed with Germany there has been a large importation of recent origin in this country from Germany and also from England and we find that dumping from abroad is in full swing.

During very recent months, in fact during one month, the month of November-December, there have been dumped into this country over 65,000 pounds of one grade alone, which is about one-seventh of the annual consumption of that particular grade and it is now in the distributor's hands ready to be dumped on the market to the American consumer at any price.

We have seen, through one of our customers, a telegram which instructed the importers of this article to sell at any price to regain their lost territory.

That is the situation that we are up against.

The CHAIRMAN. Have you a copy of that letter?

Mr. HOLLANDER. No; this, Mr. Chairman, is only a few notes, but I have a brief prepared which I would be glad to submit.

The CHAIRMAN. The point is that letter in which the foreigner instructs their agent here to hold this market at any price, to sell at any price in order to gain the lost trade. Can you furnish us with a copy of such a letter?

Mr. HOLLANDER. It was not a letter. It was a telegram.

The CHAIRMAN. A telegram, then.

Mr. HOLLANDER. Well, if our customer will consent to that we will be glad to do so. I will try to get that.

The CHAIRMAN. We would like to have that telegram, or a copy of the telegram, so that we may show it to the House.

Mr. HOLLANDER. I will try to get it. We do not have a copy of it, but it has come into the hands of one of our largest customers and I will bear that in mind and get it if I can.

The CHAIRMAN. Get it if you can, because that is valuable information.

Mr. HOLLANDER. Yes, sir; the latest quotation that I have just received through a telegram yesterday was 47 cents per pound. And of course they have been dropping from one step to another in very short succession and have cut under us all the time. We have been obliged to follow them and to sell at the same figure, but at a very decided loss, just to hold onto our trade; but it is a very serious proposition.

These importations are coming both from Germany and from England. Now, the Germans are of course at a great advantage for many reasons; but I also wish to point out that the English are at a very decided advantage over us because at the beginning of the war, seeing their opportunity and the great importance of these products, they took over a German plant that was manufacturing hydrosulphites in England for the English trade at that time according to their patent laws. They took that plant over and have been running that plant with German machinery and German labor and German experience, and they recognized the importance of this article in order to protect themselves against shortage.

In order to protect themselves from dumping from abroad, they have embargoed these articles in the same bill that the dyestuffs are contained in.

Now, if we could be sufficiently protected, we would feel encouraged to expend large sums of money to enlarge our plant, and especially to make some of the more costly raw materials ourselves, which would save a great deal of money to the ultimate consumer; but of course at the present time, not knowing whether we can stay in business at all, we do not feel like doing that. As I say, if we could get adequate protection, we are willing to spend a great deal more money; in fact, large sums of money are needed to develop this.

We should have protection until we get onto our feet, because there will be always a great deal of competition in these articles. There is another manufacturer besides us in the United States making these, and the processes are not secret or patented in any way. They are open to all.

Therefore we would respectfully urge you to grant us a protective duty of 50 per cent ad valorem and 15 cents per pound specific. And I will submit the following figures to show how we are arriving at this rate:

The prewar price of one brand of hydrosulphites was about 30 cents a pound in this country. That would, at the present exchange rate, amount to about a mark and 25 pfennigs. Ten times that would bring that price at the present day to 12 marks and a half, because we have been able to determine by our own investigation that the price over in Germany on these articles have just about gone to ten times the amount they were before the war, normally. Computing 12 marks and a half to our dollar at the present rate would only mean 17½ cents per pound; if we add to that 50 per cent ad valorem, that would be 8¾ cents, and 15 cents per pound specific would give a total price of 41¼ cents delivered on American shores. That is a great deal lower than we can manufacture it for now; but I think that with increased market, if we can hold our own here, and with longer experience and with better facilities we will probably be able to meet that in the near future.

I beg of you to bear in mind that our own investigators over in Germany have found the Germans are paying for the same class of labor which we are employing here only 50 to 70 cents per day, whereas we have to pay $5 to $6 per day.

Mr. BACHARACH. Mr. Hollander, I have noticed statements to the effect that the Germans are getting an equivalent of $1 to $1.25 per day; that statement was made here yesterday. Now, is that skilled labor or unskilled labor?

Mr. HOLLANDER. It is not skilled labor. It is labor that has been trained. Our expert chemist will take a man and train him to do a certain job, but that labor is not skilled labor such, as for instance, the machinist's trade and trades of that character.

Mr. BACHARACH. Do you know anything about the price of skilled labor there?

Mr. HOLLANDER. You mean what we call skilled labor over here?

Mr. BACHARACH. Yes.

Mr. HOLLANDER. Well, it is somewhat higher than the labor I am speaking of here, although I am not authoritatively informed on that.

Mr. BACHARACH. I understood you to say that you had had an investigation made over there and I thought possibly that you might be able to give that information?

Mr. HOLLANDER. Well, we only went into the field in which we are interested—in this field now, we take young intelligent fellows and train them to do a certain chemical job of closely watching the process.

The CHAIRMAN. Mr. Hollander, your time limit has expired. If you will file your brief with the reporter, we will be very glad to have it. Thank you.

Mr. HOLLANDER. I thank you very much. In concluding, Mr. Chairman, I wish to be allowed to make a statement that we are in full accord with the statement that Mr. Henry Howard, the president of the Manufacturing Chemists' Association, has made before your committee.

The CHAIRMAN. All right.

Mr. HOLLANDER. The percentage of labor that enters into the cost price of hydrosulfites, sulphoxylates, and leucotropes is approximately 35 per cent. At first it was much higher, but with improvements in apparatus, machinery, and labor-saving devices, this percentage is gradually decreasing. That is where the Europeans have the great advantage, and consequently they get better yield, in a very similar way to the dye industry.

Another reason for asking for a protective duty is that some of our chief raw materials are in themselves manufactured products, which are protected by tariff, such as zinc dust and formaldehyde.

Under normal conditions, with fairly constant prices and normal exchange, the ad valorem duty is preferable, because it carries a certain, if only small, protection against dumping in this way, that the fair average selling price in the country of origin is the basis. But under present conditions of instability it is imperative to be protected also by a specific duty to care for the low exchange rate and dumping. If the protection should prove too high, we ourselves shall be glad to see it lowered to whatever it ought to be at the time of the change.

In the face of the present heavy dumping, we respectfully ask for immediate relief, either by restoring the Payne-Aldrich bill or other

suitable measure. Whatever steps are taken, it is essential that the ad valorem duty should be based on the fair average selling price in this country.

In my brief which I shall submit I am explaining fully the use and importance of artificial bates, titanium potassium oxalate, and titanium salts, tartar emetic, and synthetic tanning materials.

To point out how these tariffs would affect the ultimate consumer, the woman wearing a dress of cotton goods, and everybody wearing a pair of shoes:

Value of hydrosulfites, sulphoxylates, and leukotropes in a piece of cotton goods sufficient for a dress would be one-half to three-fourths of a cent.

Value of titanium potassium oxalate in one pair of tan-colored shoes, one-eighth of a cent.

Values of artificial bate in one pair of shoes, one-twentieth of a cent.

Value of synthetic tanning material in one pair of shoes, six-tenths of a cent.

Value of tartar emetic in one pair of shoes, one-eighth of a cent.

BRIEF OF ROHM & HAAS CO. (INC.), PHILADELPHIA, PA.

I am vice president and chemical director of Rohm & Haas Co., a Delaware corporation with its principal office at 40 North Front Street, Philadelphia, Pa. Our factory is at Bristol, Pa. We have branches in Chicago, Ill.; Gloversville, N. Y.; Boston, Mass.; Buenos Aires, Argentina; Santiago, Chile; and agencies in other countries.

My purpose in appearing before this committee is to submit to you detailed information in regard to certain chemicals manufactured by us for use in the tanning and textile industries, with the hope that your committee can see its way clear to recommend adequate tariff protection on the articles in question.

Our company is desirous of obtaining protection for five articles made by us. For the convenience of the committee we are submitting detailed information in regard to each of the products. The products are as follows:

(A) Hydrosulphites, sulphoxylates, and the equivalents of leukotrope.
(B) Artificial bates.
(C) Titanium salts.
(D) Antimony salts.
(E) Synthetic tans.

(A) HYDROSULPHITES, SULPHOXYLATES, AND THE EQUIVALENTS OF LEUKOTROPE.

1. Items and paragraphs in which interested, changes in duties recommended, reasons for such recommendations:

At the present time hydrosulphites and sulphoxylates are subject to a duty of 15 per cent ad valorem under paragraph 5 of schedule A, which states that all chemicals not especially provided for are subject to a rate of 15 per cent ad valorem. The leukotropes are subject to 15 per cent ad valorem under paragraph 21.

We recommend that new paragraphs be added to schedule A reading as follows:

"Paragraph —. Hydrosulphites and sulphoxylates and all mixtures and compounds thereof, 15 cents per pound and 50 per cent ad valorem."

"Paragraph —. Leukotropes and leukotrope equivalents and all mixtures and compounds thereof, 15 cents per pound and 50 per cent ad valorem."

2. Purposes for which used:

The main use of hydrosulphites, sulphoxylates, and leukotrope equivalents is found in the textile industry, where they are very widely used for dyeing with indigo and vat dyes, for bleaching, for printing designs on cotton goods and silk, and for stripping colors from shoddy. There are various types of hydrosulphites, sulphoxylates, and mixtures with leukotropes suitable for special purposes in the textile industry.

Besides the above uses in the textile industry, the sodium hydrosulphite is widely used in the sugar industry for bleaching sirups and molasses. Furthermore, it is indispensable for the manufacture of salvarsan, arsphenamine, or 606. It is also widely used for bleaching straw for straw hats.

3. Importance of industry and reasons for recommending adequate protection:

All of the arguments in favor of protecting the manufacture of dyestuffs and other fine chemicals in the United States apply equally as strongly to protecting the manufacture of hydrosulphites, sulphoxylates, and leukotrope equivalents. Their manufacture is a new industry in this country. The process of manufacturing them is equally as difficult and equally as complicated as the manufacture of dyestuffs. Since a large number of the most important dyes can not be used without them, such as the vat dyes and indigo, it is in our opinion essential to the textile industry that the United States should not be dependent on foreign sources of supply for hydrosulphites, but that their manufacture in this country should be safeguarded and continued. As already mentioned, these hydrosulphites are indispensable in the manufacture of arsphenamine. During the war the supply of hydrosulphite threatened to give out, and if the American manufacturers had not been able at great cost and effort to supply this material our health authorities, both civil and military, would have been very seriously handicapped in the treatment of syphilis. It is evident that the manufacture of a product of such fundamental importance as arsphenamine should not be jeopardized by depending on foreign supplies of hydrosulphite.

4. Development of industry and future prospects:

The manufacture of hydrosulphites, sulphoxylates, and leukotrope equivalents for sale has developed in the United States since the outbreak of the war in 1914. Before that time all of these products were imported from Germany. The only manufacturers of these products in Germany were the large dyestuffs manufacturers, such as Badische Anilin & Soda Fabrik, Hoechst, Cassella, and Beyer. These four sold these articles as an adjunct to their dyestuffs business. When the European supply was cut off by the war, the price of sodium hydrosulphite advanced from about 30 cents to over $3 per pound, although during the same time the demand for the article was very considerably reduced on account of the inability of the textile manufacturers to secure adequate supplies of indigo and vat dyes.

Our company and other companies throughout the United States, after extensive and costly experiments, have succeeded in making hydrosulphites, sulphoxylates, and leukotrope equivalents of a quality fully equal to the prewar imported products. The American manufacturers of these articles stand ready to furnish adequate supplies at reasonable prices.

We understand that the Tariff Commission has drawn up a full report on hydrosulphites, sulphoxylates, and leukotrope equivalents.

5. Domestic production costs and wages and comparable costs and wages in foreign countries; information concerning dumping, unfair competition, and other practices aimed to impair or destroy domestic industries:

During the last year we have brought down our cost of production of sodium hydrosulphite from over $1.25 per pound to a point where it is possible for us to offer contracts for 1921 at 55 cents per pound. The raw materials used in the manufacture of hydrosulphites, sulphoxylates, and leukotrope equivalents are as readily available in the United States as in Germany or England. The labor cost in the United States is much greater than the labor cost abroad. At the present time, on account of the great depreciation of the British pound and the German mark, there is no doubt that it is impossible for the American manufacturers to continue against foreign competition. Furthermore, the foreign manufacturers have a decided advantage in their longer experience.

There is no doubt that the gigantic combinations of European dyestuffs manufacturers will use every means to regain their lost territory. German and English importers of sodium hydrosulphite are at the present time flooding the market with their products. One firm alone has, according to the Oil, Paint, and Drug Reporter, imported over 90,000 pounds of hydrosulphite from November 15 to December 13, 1920; this means that in less than one month one firm alone imported one-fifth as much as was brought into the United States by all importers during 1913.

They are offering to cut their prices to almost any extent in order ro secure the business. Within the last few weeks one of the largest users of sodium hydrosulphite in the United States informed us that he had seen a cable to the American representative of a foreign manufacturer, instructing him to get the hydrosulphite business of the firm in question at any cost, regardless of price.

6. Sources of imports; volume and price at which offered:

As mentioned above, before the war substantially all of the hydrosulphites, sulphoxylates, and leukotrope equivalents came from Germany. At the present time, a moderate amount of hydrosulphite is coming from England, but the greatest portion comes from Germany. We do not know definitely that any sulphoxylates have been imported since the war, but large quantities of sodium hydrosulphite are coming in

(See under 5.)

We wish to call to the attention of the committee the price policy which has been followed by the representatives of the European manufacturers. During the war, when the supply from Europe was shut off, the stocks of hydrosulphite, sulphoxylates, and leukotrope equivalents on hand at the beginning of the war were sold at prices as high as $3 per pound.

There was no reduction in the prices quoted from abroad until we put our hydrosulphite on the market over a year ago at a price of $1.25 per pound. We have regularly reduced our quotations as fast as it was possible for us to bring down our cost of production until now we are selling at 55 cents per pound, which is as low as we can go under present conditions. The European manufacturers as soon as they were obliged to face American competition dropped from their high price of $3 per pound, and every time our price has gone down they have tried to cut under us by 10 to 15 cents per pound; they are now offering at 48 cents per pound. We do not know how low they would go in order to regain their American business, but we have no doubt that if adequate protection is not granted the European dyestuffs manufacturers will make whatever cut in their price may be necessary to drive the American manufacturers out of business and will then follow their old policy of immediately raising prices again.

With a fairly large investment of new capital, we are confident that within a reasonable time we can reduce our price to 35 cents per pound, but we would not feel justified in making these expenditures until we can feel assured that the American manufacturers of hydrosulphites will be protected against European competition.

The yearly prewar consumption of sodium hydrosulphite was more than half a million pounds of sulphoxylate of soda about 300,000 pounds, and of other chemicals in this class about 200,000 pounds more.

(B) ARTIFICIAL BATES.

1. Items and paragraphs in which interested; changes in duties recommended; reasons for such recommendations:

At the present time artificial bates are subject to an ad valorem tariff of 15 per cent under paragraph 5 of Schedule A which covers chemical compounds, preparations, etc., not especially provided for.

We recommend that a new paragraph should be added to Schedule A, reading as follows:

"Paragraph —. Artificial bates, 10 cents per pound and 45 per cent ad valorem."

In the manufacture of leather, one of the most important processes is the so-called bating process. The purposes of the bating process are:

I. To remove the lime from the skins (lime being the chemical most generally used to unhair the skins).

II. To soften the hide by removing a certain portion of the hide substance.

All leather with the exception of sole leather and some harness leather must be bated, and even in the case of these two kinds a large proportion of the manufacturers bate their hides. Previous to the invention of artificial bates, dog manure and chicken manure had been used from time immemorial in practically every country in the world. Although the dog manure was the best known substance for accomplishing the results desired, it was by no means satisfactory since it was filthy to use, it varied in quality, and did not give uniform results. The tanners of the United States are at the present time absolutely dependent on artificial bates. During the war we received letters from hundreds of our customers stating that the artificial bate was one of the most indispensable items in their tanneries and adding that they would have to shut down if it could not be secured. None of the tanners would revert to the use of dog manure on account of its obvious disadvantages, but even if they wished to do so it would be impossible for them to secure an adequate supply of dog manure at the present time. Before the war, substantially all of the dog manure came from Turkey; this source of supply was, of course, cut off by the war. Since the dogs in Turkey have all been killed there is practically no possibility of this source of supply opening up again. It may be of interest to the committee to know that 1 pound of our artificial bate is equal to 5 to 10 pounds of dog manure; since our sales of artificial bate in the United States amount to about 2,000,000 pounds per year, it would mean that 10,000,000 to 20,000,000 pounds of dog manure would be necessary to take the place of the artificial bate.

The artificial bates give results that are thoroughly satisfactory, always uniform, and they have eliminated the filthiness of using manures.

Although the bating process is one of the most important in any tannery, the actual expense for bate is almost infinitesimal in comparison to the final cost of the leather. The average cost of artificial bate for enough leather to make a pair of shoes would be less than one-twentieth of a cent.

We feel that in view of the importance of the bating process to the tanning industry the American manufacture of artificial bates should be protected.

2. Development of the industry and future prospects:

Manure bates were used exclusively by all tanners until about 1907. The best chemists in the leather industry had been working for 50 years trying to find a satisfactory artificial bate. In 1907 satisfactory artificial bates were first put on the market. Since that time artificial bates have replaced the natural bates in practically every tannery in the world.

3. Foreign competition:

At the present time artificial bates are being manufactured by firms in England, Germany, France, Italy, and Switzerland and are being sold there at prices we can not meet. No doubt artificial bates will be offered here by foreign manufacturers in the near future if adequate protection is not granted.

The foreign manufacturers of artificial bates can secure their labor at much lower prices than the American manufacturers. Furthermore, the foreign manufacturers at the present time have a very decided advantage over the American manufacturers on account of the present exchange situation.

(C) TITANIUM SALTS, AND MIXTURES AND COMPOUNDS THEREOF.

1. Items and paragraphs in which interested; changes in duties recommended; reasons for such recommendations:

At the present time titanium salts are subject to a duty of 15 per cent ad valorem under paragraph 5 of Schedule A. We recommend that a new paragraph be added to Schedule A reading as follows:

"Paragraph —. Titanium salts, and mixtures and compounds thereof, 15 cents per pound and 50 per cent ad valorem."

The most important of the titanium salts is titanium potassium oxalate, which is known technically in the dyeing industry as a mordant. There are certain dyes which can not be used on textiles and leather unless a mordant is used in conjunction with them to fix the color to the fabric and make it permanent; if no mordant is used with such dyes, the color would not be fast to light or washing. Titanium potassium oxalate is one of the most important of these mordants; it is used very extensively in the leather industry for securing yellow and brown shades of leather.

Titanium salts are now made in the United States by us and other firms as well in ample quantities to meet all demands.

2. Foreign competition:

We have already been obliged to discontinue the manufacture of titanium potassium oxalate on account of German competition. The importers of this material have offered it at 48 cents per pound. Our price at the present time for the stock we still have on hand is 60 cents per pound. It is not worth while to continue the manufacture of the material if the selling price is lower than 60 cents per pound.

Of the raw materials used in the manufacture of titanium potassium oxalate, the German manufacturers can secure oxalic acid and potash at lower prices than are available to the American manufacturers. Titanium, which is the other raw material used, is as readily available in the United States as abroad.

The fact that titanium potassium oxalate is of very considerable importance to the leather industry is well borne out by the fact that when the European supply was cut off by the war the price advanced from about 30 cents per pound to as high as $2.50 per pound. The firms that wished to make the best shades of brown leather for the army had to have titanium potassium oxalate. Our firm was the first one in the United States after the start of the war to undertake the manufacture of titanium potassium oxalate. We put it on the market at $1.80 per pound; as rapidly as the price of raw materials permitted we reduced our price to our present quotation of 60 cents per pound. Other firms in the United States subsequently produced titanium potassium oxalate of satisfactory quality. We are under the impression that all of the domestic manufacturers, including ourselves, have now stopped producing titanium potassium oxalate on account of their inability to meet foreign competition.

Before the war, titanium potassium oxalate was made in the United States by one or two firms. They were quickly forced to discontinue its manufacture by the cutting of prices by the European manufacturers. As soon as the American manufacturers were out of business, prices again advanced very considerably. This prewar history is being repeated by our present experience; we have stopped the manufacture of titanium potassium oxalate and will not resume until we are assured of adequate protection.

On account of the importance of insuring a domestic source of supply of titanium potassium oxalate, we respectfully recommend that an adequate tariff be adopted.

(D) ANTIMONY SALTS, AND MIXTURES AND COMPOUNDS THEREOF.

1. Items and paragraph in which interested; changes in duties recommended; reasons for recommendations:

At the present time antimony salts are subject to a duty of 25 per cent ad valorem under paragraph 144 of Sechedule C, which reads as follows:

"Antimony, as regulus or metal, and matte containing antimony but not containing more than 10 per cent of lead, 10 per cent ad valorem; antimony oxide, salts, and compounds of, 25 per cent ad valorem."

We recommend that antimony salts and compounds thereof should be taken out of paragraph 144, Schedule C, and that a new paragraph should be added to Schedule A reading as follows:

"Paragraph —. Antimony salts, and mixtures and compounds thereof, 15 cents per pound and 50 per cent ad valorem."

2. Development and history of industry:

Antimony salts, like titanium salts, are what are known technically in the dyeing industry as mordants. Certain dyes can not be used on textiles and leather unless a mordant is used in conjunction with them, to fix the color to the fabric and make it permanent. If no mordant is used with such dyes, the colors will not be fast to light or washing. Among the most important of these mordants are tartar emetic, antimony lactate. and the double fluorides of sodium and antimony. All of these products are antimony salts.

Antimony salts are now made in the United States by our firm and other firms in sufficient quantities to meet the demand. It will not be possible, however, for the industry in this country to meet foreign competition unless the manufacture of these products is adequately protected. Potash, an ingredient of tartar emetic, is much cheaper in Germany than here: labor also is cheaper. The German manufacturers, like ourselves, are dependent on China for antimony oxide.

(E) SYNTHETIC TANNING MATERIALS.

We recommend that a paragraph be added to Schedule A reading as follows:

"Paragraph —. Synthetic tanning materials, 45 per cent ad valorem and 7 cents per pound specific."

Synthetic tanning materials were first put on the market shortly before the war by one of the largest European dyestuffs manufacturers. Since the war half a dozen chemical manufacturers of the United States have started the manufacture of synthetic tanning materials. These products are of increasing importance and there is considerable possibility that their introduction will make very substantial changes in the tanning industry of the country.

Synthetic tanning materials are usually made from coal-tar derivatives. The reason for their increasing importance is that they shorten the time of tanning very considerably and make it possible to effect a considerable saving in tanning materials. The increasing shortage of vegetable tanning materials, including barks, makes this saving very important.

On account of the importance of these products to the leather industry many different chemical manufacturers in the United States, as well as tanners throughout the country, have been making during the last two years very extensive and costly experiments in regard to the use of these products. The chemical manufacturers have invested substantial sums in developing these processes.

FOREIGN COMPETITION.

The European manufacturers of synthetic tanning materials are already offering these products to the tanners throughout the United States, and we have run across several instances where the samples of the European products are being tried by the American tanners.

We wish to call to the attention of the committee that synthetic tanning materials are included in the so-called dyestuffs bill, H. R. 8078, of the Sixty-sixth Congress, first session.

BRIEF OF THE MERRIMAC CHEMICAL CO., BOSTON, MASS.

DEAR SIR: On behalf of the Merrimac Chemical Co., I beg to submit the following brief for the consideration of your committee in connection with its investigations regarding tariff:

Sodium hydrosulphite.—Under paragraph 5, Schedule A, of the act of 1913, sodium hydrosulphite is subject to a duty of 15 per cent ad valorem.

We respectfully beg that such duty be changed to a specific duty of 25 cents per pound and that sodium hydrosulphite be given a special heading under schedule A.

Our reason for requesting a specific duty of 25 cents per pound is that, in our judgment, this is the minimum protection that will justify American manufacturers in continuing and extending the manufacture of this product.

Sodium hydrosulphite is used chiefly in the textile industry in conjunction with indigo and vat dyes. It is also employed in bleaching and for various other purposes.

While not a dyestuff or intermediate, it really comes in the same class because its use is indispensable when indigo and vat dyes are employed. Formerly sodium hydrosulphite was imported from Europe, chiefly from Germany, and its manufacture was not established in this country until after the war.

The importance of our textile and other manufactures being independent of Europe for their supply of sodium hydrosulphite is so great that our company acting under license from the Federal Trade Commission entered upon the manufacture of sodium hydrosulphite and has been successful in making a product of high quality equal in every respect to the foreign material.

The process of manufacture is a complicated and difficult one, requiring much expensive research work and large capital investment in plant and equipment.

At the present time competition from Germany is of such a nature that unless adequate protection is given the American manufacturer, not only will further extension of manufacturing operations be prevented, but existing plants must shut down and the industry be abandoned. In our opinion, to permit this will be a most serious error and one fraught with great danger to the textile and other industries that require indigo vat dyes, or are in any way dependent upon sodium hydrosulphite.

The situation is greatly aggravated by reason of existing conditions with respect to foreign exchange. Before the war sodium hydrosulphite was sold in this country at prices roughly equivalent to 18 cents per pound in country of origin. It is recognized that labor is receiving in Germany to-day about eight times the prewar wage. The raw materials entering into sodium hydrosulphite are produced in Germany and labor is a considerable factor in their cost. If we assume the cost of labor and raw materials at ten times the prewar figures, sodium hydrosulphite would be sold at ten times 18 cents, equaling $1.80 in Germany with the mark at parity. With exchange as at present, this would be roughly equivalent to 10 cents per pound in American money. Thus it is evident that sodium hydrosulphite could be landed in this country at a price so low as to preclude any possibility of competition.

We have reason to believe, however, that regardless of the cost, imported sodium hydrosulphite is offered at prices intended to eliminate American production. For example, when we first offered our product the market price was about $1.15 per pound. Shortly afterwards this was reduced to 80 cents, then 70 cents, 60 cents, and finally a figure of 48 cents per pound has been made. It is difficult to say how low the price may go. In this connection it may be well to note that while certain amounts of sodium hydrosulphite have been imported from England, late receipts have been, to the best of our knowledge, from Germany, and in substantial quantities.

In conclusion, I may say that our company has expended considerable sums in experimental and research work in order to successfully produce sodium hydrosulphite. We desire to increase our facilities to meet the requirements of American consumers, and to make not only sodium hydrosulphite but compounds and mixtures allied to sodium hydrosulphite. Without, however, such protection as has been indicated, it will not be possible to extend our business or even continue same, and in due course unless sodium hydrosulphite is produced in this country, our textile manufacturers and others to whom sodium hydrosulphite is an absolute necessity will find themselves at the mercy of foreign makers, and it is safe to assume that prices will be increased if American competition is eliminated.

S. W. WILDER, *President.*

BRIEF OF THE PITTSBURGH SODA PRODUCTS CO., PITTSBURGH, PA.

The Pittsburgh Soda Products Co., of Pittsburgh, Pa., respectfully submits the following brief for your consideration in support of the contention that the present duty on sodium hydrosulphite in paragraph 5 of 15 per cent ad valorem should be changed.

We believe that the following new paragraph should be inserted:

> Paragraph —. Sodium hydrosulphite, 28 cents per pound and 25 per centum ad valorem.

Sodium hydrosulphite is the most important of the hydrosulphite group. It is necessary to the manufacture of Salvarsan or "606." It is employed in bleaching straw, and also sirup and molasses. It is, however, of greatest value in the textile

industry, where it is used in the process of dyeing with indigo and vat dyes. Its use in the process of dyeing with indigo and vat dyes is, or at least is destined to become, its greatest use. It is not a dye or a dye intermediate, but is the best agent yet discovered for making the dye take the cloth. In order to use an indigo or vat dye a reducing agent must be used in order to put the color on the fiber. The best reducing agent for this purpose is sodium hydrosulphite. Indigo without sodium hydrosulphite or a similar compound could not be used in coloring cloth. It reduces the dye body to a colorless or leuco base, which is soluble in water or other liquid used in the dye bath. The cloth is then placed in the bath and is impregnated with the solution of the leuco base, which is soluble. When withdrawn from the dye bath and exposed to the air oxidation takes place, the original color of the dye returns to the cloth, and the dye is fixed in the fiber. Sodium hydrosulphite is used with practically all so-called vat dyes. For instance, in dyeing shirting, the stripes are placed in the cloth by means of various vat colors mixed with sodium hydrosulphite. Sodium hydrosulphite is also used as a reducing agent with indanthrene and carbazol colors. Thus it will readily be seen that without sodium hydrosulphite to use as a reducing agent the dye industry would be greatly crippled.

The earliest reducing agent used in the dye industry was woad. An improvement on this process was discovered later. Zinc dust, sodium bisulphite, and sulphuric acid were mixed together in solution and the cloth was dipped in this mixture. The objection to this process is that zinc mud is apt to be stirred up while the cloth is in the solution, which causes the cloth to be streaked.

Some years before the war the Germans discovered sodium hydrosulphite and applied it to its present use in the dye industry. In Germany there are several well-equipped factories making sodium hydrosulphite. The Badische Anilin & Soda Fabrik located at Ludwigshaven on the Rhine, can supply the entire world with sodium hydrosulphite. Before the war they had eight converters carrying a total of 4,000 to 5,000 pounds of zinc dust per charge, and they ran three charges a day. The Germans are able to manufacture this product for 8 cents or 10 cents a pound, while in normal times it can hardly be made for less than 30 cents a pound here. Even while making sodium hydrosulphite at this low production cost the Germans were retailing it in this country at from 30 to 50 cents per pound. At present the price in this country is probably about 50 cents per pound and the production cost is about 40 cents per pound. The different elements of the production cost are as follows: Materials, 50 per cent; overhead, 20 per cent; labor, 30 per cent.

It can readily be seen that the Germans with their highly developed industry, enormous production, and cheaper labor can in these or in normal times control the dye industry in this country and smother the manufacture of sodium hydrosulphite here. They are at present dumping thousands of pounds on the American market in the hope that they may destroy the American dye industry before it is started. If there is no sodium hydrosulphite manufactured in this country the American makers of indigo dyes will be crippled, for the Germans will carry out the policy, started prior to the war, of selling their hydrosulphite only with their own indigo dyes, and at a price arbitrarily set by them.

It is also interesting to note that since 1914 sodium hydrosulphite has been made in England according to German formulas, and the American manufacturer will have to compete with products coming from that country.

Sodium hydrosulphite should be given a separate paragraph in the tariff bill because it is the most important and most useful of the hydrosulphite group. There has been a wide difference in prices of the various hydrosulphites. During the war when sodium hydrosulphite sold at $1.60 per pound, rongalite, another hydrosulphite, sold at 75 cents per pound; thus it will be seen that a duty which would protect rongalite would not protect sodium hydrosulphite.

We have the largest plant in this country devoted to the exclusive manufacture of sodium hydrosulphite. We expect, in the near future, to manufacture other products of use in the dye industry, which are at present made only in Germany. We can do this only if properly protected from dumping from abroad. We feel that if the American dye industry is to grow and become independent of Germany it must be protected for a few years at least. In order to protect the dye industry we believe it will be absolutely necessary to place a higher duty on compounds inseparably connected and linked with the dye industry, such as sodium hydrosulphite. Therefore we respectfully pray that the above proposed paragraph in regard to the duty on sodium hydrosulphite be inserted in the new tariff bill.

W. E. WRENSHALL, Jr., *Vice President.*

COBALT SALTS, COMPOUNDS, AND MIXTURES.

[Paragraph 5.]

BRIEF OF HARSHAW, FULLER & GOODWIN CO., CLEVELAND, OHIO.

We are manufacturers of cobalt acetate, cobalt sulphate, cobalt linoleate, and other salts of cobalt and mixtures containing cobalt. Our factory is located at Cleveland, Ohio. Our raw material is either cobalt ores, cobalt metal, or cobalt oxide. Cobalt ores and cobalt metal are now on the free list under paragraph 453. Cobalt oxide is in the dutiable list under paragraph 24. If cobalt and cobalt ores should be taken from the free list and a duty imposed and if there should be an increase in the duty on cobalt oxide, then we desire a compensating increase in duty on cobalt salts, compounds, and mixtures.

Prior to August, 1914, practically all cobalt salts and compounds were manufactured in Germany and other foreign countries. Our business has been developed since that time. Cobalt salts and cobalt compounds are now dutiable at 15 per cent ad valorem under paragraph 5. In order that we may continue said business successfully, we firmly believe the following rates of duties must be imposed upon goods of foreign manufacture, namely: Cobalt acetate, cobalt sulphate, cobalt linoleate, and all chemical compounds and mixtures containing cobalt, 33⅓ per cent ad valorem.

W. A. HARSHAW, *President*.

NICKEL SULPHATE, CARBONATE, AND COMPOUNDS.

[Paragraphs 5, 155, 585.]

BRIEF OF HARSHAW, FULLER & GOODWIN CO., CLEVELAND, OHIO.

We are manufacturers of nickel sulphate, nickel carbonate, nickel and ammonia sulphate, and other chemical compounds and mixtures containing nickel. Our factory is located at Cleveland, Ohio. Our raw material is either nickel ores, nickel metal, nickel matte, or nickel oxide. Nickel ores and nickel matte are now on the free list under paragraph 585. Nickel metal and nickel oxide are on the dutiable list under paragraph 155. Duty 10 per cent ad valorem. If nickel ores and nickel matte should be taken from the free list and a duty imposed, and if there should be an increase in the duty on nickel metal and nickel oxide, then we would desire a compensating increase in duty on nickel salts, nickel carbonate, nickel and ammonia sulphate, and other compounds and mixtures containing nickel. Nickel salts and compounds are now dutiable at 15 per cent ad valorem under paragraph 5.

There are many reasons why we can not manufacture these materials as cheaply as can manufacturers in Canada, England, France, and other foreign countries. In order that we may continue said business successfully we firmly believe the following rates of duties must be imposed on goods of foreign manufacture, namely: Nickel salts and all chemical compounds and mixtures containing nickel, 33⅓ per cent ad valorem.

W. A. HARSHAW, *President*.

ANTIMONY OXIDE, SALTS, AND COMPOUNDS.

[Paragraph 5.]

BRIEF OF STIBIUM PRODUCTS CO., ELYRIA, OHIO.

We are manufacturers of antimony oxide, antimony salts, antimony sulphuret, and various compounds and mixtures containing antimony. Our factory is located at Elyria, Ohio. Our raw material is either antimony ore, crude or needle antimony, or antimony metal. Antimony ore and stibnite containing antimony, but only as to the antimony content, is on the free list under paragraph 396. Crude or needle antimony was admitted free of duty as an ore of antimony during the period October, 1913, to September, 1917. On October 2, 1917, the Treasury Department ruled that needle antimony, liquated antimony, and liquated stibnite, which had been admitted free, as antimony ore, should be classified as "matte" and subjected to a duty of 10 per cent ad valorem. This has been protested and the case is still pending. If there should

be an increase in the duty on these raw materials, we would desire a corresponding compensating increase on the products of antimony. The present duty on antimony oxide is 25 per cent ad valorem. This is insufficient, as we can not compete against manufacturers located in China. We desire a duty of 1½ cents per pound and 25 per cent ad valorem. The present duty on antimony salts, antimony sulphuret, antimony compounds, etc., is 15 per cent under paragraph 5. The original schedule, issued by the Treasury Department, covering the tariff act of 1913, classified these articles as dutiable at 25 per cent under paragraph 144 of the metal schedule, but a decision of the customs court in 1916 placed them in paragraph 5, chemical schedule, dutiable at 15 per cent. We believe that the antimony oxide, sulphuret, salts, and compounds should properly be in the chemical schedule, and therefore ask that a paragraph be provided in the chemical schedule to cover same, reading as follows: Antimony oxide, 1½ cents per pound, specific and 25 per cent ad valorem. Antimony salts, antimony sulphuret, antimony compounds, and all mixtures containing antimony, not otherwise provided for, 5 cents per pound specific and 25 per cent ad valorem. These duties are absolutely necessary if the manufacture of these articles is to be continued in this country.

J. A. McGeorn, *President.*

FLUORIDES, BIFLUORIDES, AND SILICO FLUORIDES.

[Paragraph 5.]

Brief of Harshaw, Fuller & Goodwin Co., Cleveland, Ohio.

We are manufacturers of the fluorides of various kinds. Our factory is located at Cleveland, Ohio. The materials are used in the manufacture of insecticides and for various industrial purposes. Our basic raw materials are fluorspar (calcium fluoride) and sulphuric acid. Fluorspar is dutiable under paragraph 76 at $1.50 per gross ton. Ground fluorspar is dutiable under paragraph 81 at 20 per cent ad valorem. If there should be any increase in these duties, then we desire a compensating increase in the duties on fluorides.

The duty on fluorides at present is 15 per cent ad valorem, under paragraph 5. This is insufficient. Goods of foreign manufacture are now arriving in this country and are being sold at prices which we can not meet under our operating conditions, and in consequence our factory is practically closed.

We desire a duty of 33⅓ per cent ad valorem.

W. A. Harshaw, *President.*

ALUM AND SULPHATE OF ALUMINA.

[Paragraph 6.]

SALMON W. WILDER, MERRIMAC CHEMICAL CO., BOSTON, MASS.

Mr. Wilder. Mr. Chairman, and gentlemen of the committee, I wish to present two briefs, one covering alum, alum cake, patent alum, sulphate of alumina, etc., and the other covering sodium hydrosulphite.

Under the act of 1913, sulphate of alumina was subject to a tax or duty of 15 per cent ad valorem.

We have asked that this duty be increased to a specific one of three-tenths cent per pound in case of one grade of alumina.

Mr. Hull. How much of an increase is that?

Mr. Wilder. I can not say exactly. It would possibly be 15 cents per 100 pounds.

Our reason for that is that we believe the 1913 duty is inadequate to protect our industry and we have special reasons why we may expect that importation from now on of sulphate of alumina and allied compounds will increase. It is a fact that in Europe the production of sulphuric acid has been greatly increased since the war, and sulphate of alumina is a very natural vehicle for disposing of

sulphuric acid, and we feel that this country may become a dumping ground for that product.

I think the other points will be covered fully in my brief.

Mr. RAINEY. Is that hydrate of alumina?

Paragraph 6 of the act of 1913 provides that alum, alum cake, patent alum, sulphate of alumina, etc., are subject to a duty of 15 per cent ad valorem.

Mr. WILDER. I am not touching on that at all, sir.

Mr. RAINEY. Is sulphate of alumina and those articles in that group made out of bauxite?

Mr. WILDER. They are made out of bauxite; bauxite is the essential raw material.

Mr. RAINEY. What foreign countries import those articles into this country?

Mr. WILDER. What, bauxite?

Mr. RAINEY. Or sulphate?

Mr. WILDER. They come from England and Germany. As a matter of fact the importations have been very small during the war, and since the war they have been nil, but it is reasonable to expect with conditions which are now prevailing that the importation will increase.

Mr. RAINEY. Are you asking for an increase in tariff on bauxite?

Mr. WILDER. No, sir.

Mr. RAINEY. Just on sulphate?

Mr. WILDER. Sulphate of alumina and the compounds which go with them, of course; bauxite is on the free list.

Mr. HULL. Don't you think that the bauxite ought to have tariff protection?

Mr. WILDER. I do not.

Mr. OLDFIELD. Why?

Mr. WILDER. I do not think that it would make a particle of difference so far as bauxite is concerned.

Mr. OLDFIELD. What proportion of bauxite is produced in this country, and what part is shipped in?

Mr. WILDER. That I can not say.

Mr. OLDFIELD. Do you know how much is imported?

Mr. WILDER. I do not know how much is imported.

Mr. GREEN. My recollection is that as far back as 1914 there was only about 1 per cent of the sulphite being imported.

Mr. WILDER. That is true.

Mr. GARNER. But that ought to be protected, being a manufactured product.

Mr. WILDER. Yes; but bauxite is a raw material, and is on the free list.

Mr. OLDFIELD. Don't you think that bauxite ought to be protected by the tariff?

Mr. WILDER. I do not think so.

Mr. GREEN. I understand that they think so.

Mr. WILDER. We, ourselves, are importers and miners of bauxite

Mr. GARNER. Mr. Wilder, you import sulphite, and you want to keep out this 1 per cent which is coming in competition with your 99 per cent, but it does not make much difference whether the bauxite fellow has any protection to keep out the 20 per cent, we will say, which comes in competition with his 80 per cent?

Mr. WILDER. I do not feel that way at all about it. We are producers of bauxite. We are miners and also importers of bauxite.

Mr. RAINEY. Have you got any connection with the American Aluminum Co.?

Mr. WILDER. I beg your pardon.

Mr. RAINEY. Have you got any connection with the American Aluminum Co.?

Mr. WILDER. No, sir.

Mr. RAINEY. Where do you mine bauxite?

Mr. WILDER. We have deposits in Tennessee, and we have been importers of bauxite from France and from South America.

Mr. RAINEY. You have been mining bauxite in Tennessee?

Mr. WILDER. We are mining in Tennessee now.

Mr. RAINEY. Does the American Aluminum Co. own most of the deposits in Tennessee?

Mr. WILDER. I do not think so.

Mr. RAINEY. The American Aluminum Co. has nothing to do with the production of this sulphite you are talking about?

Mr. WILDER. No, sir; not to my knowledge.

Mr. RAINEY. Except to furnish bauxite?

Mr. WILDER. They do furnish bauxite, I think, to several manufacturers of sulphite.

Mr. GREEN. Well, I think there is only about 1 per cent used in the manufacture of aluminum which is imported.

Mr. WILDER. It is a small amount, but I think we are getting away from what I am telling about. I am not bringing up this product, but I think it would be a serious matter to impose a duty on bauxite, because from now on, I think, by reason of the quality of the product the importations from abroad may be expected to largely increase.

Mr. GREEN. Do what?

Mr. WILDER. I think that the importation from abroad may be largely increased.

Mr. RAINEY. Of bauxite?

Mr. WILDER. And that is my experience and my judgment as a domestic manufacturer.

Mr. RAINEY. Do you know whether or not there is a difference in the quality?

Mr. WILDER. There is a difference in quality.

Mr. RAINEY. In favor of the foreign product?

Mr. WILDER. Yes, sir; in favor of the foreign material.

Mr. HULL. What do you think would be the result of a duty on bauxite, an increase at the present time in view of the present trade situation?

Mr. WILDER. Personally, I do not think it would make any difference. Of course, if we have a high duty put on foreign bauxite, it might result in the market of our product going up to meet the prices of the foreign product.

Mr. RAINEY. The world price, anyway, of bauxite, is fixed by the American Aluminum Co.?

Mr. WILDER. I beg your pardon.

Mr. RAINEY. The world price of bauxite anyway is fixed by the American Aluminum Co., is it not?

Mr. WILDER. Not to my knowledge.

Mr. RAINEY. I remember in the discussions of the Underwood tariff bill that we had evidence which was submitted by the American Aluminum Co., and they said that they had drawn an agreement which all of the bauxite producers in the world outside of the United States had signed, fixing a world price for bauxite and also for aluminum and that they did not sign because they could not on account of our antitrust law, but the gentleman who appeared here representing the American Aluminum Co. said he drew himself the agreement which fixed the world price for these products about which we are talking, and while they did not sign, they could not under the law; but he said they would have signed if they could have done so under the law. At any rate the American producers, the American Aluminum Co., fixes the world price of all of these things, including the world price of bauxite, according to the testimony of this gentleman representing the American Aluminum Co.

That company started out as a $20,000 corporation a few years ago, and now they are a $20,000,000 corporation, controlling the production of aluminum in Canada as well as in the United States, and probably also in the world.

The CHAIRMAN. Mr. Wilder, your time has expired.

Mr. GARNER. There is just one question, if you will permit me, I should like to ask this witness. You say you see no reason why bauxite would increase the cost of sulphite. If we levied a reasonable tariff on bauxite and did not increase the costs to the consumer we would get that much money into the Treasury, and you gentlemen who import it would pay the taxes, wouldn't you?

Mr. WILDER. I dare say that we would.

Mr. GARNER. That would be one instance, then, in the history of our country where the ultimate consumer would not have to pay the tax.

BRIEF OF THE MERRIMAC CHEMICAL CO., BOSTON, MASS.

DEAR SIR: On behalf of the Merrimac Chemical Co:, I beg to submit the following brief for the consideration of your committee in connection with its investigations regarding tariff:

Alum, alum cake, patent alum, sulphate of alumina, etc.—Paragraph 6 of the act of 1913 provides that alum, alum cake, patent alum, sulphate of alumina, etc., are subject to a duty of 15 per cent ad valorem.

We respectfully request that alum, alum cake, patent alum, sulphate of alumina, and aluminous cake, containing not more than 15 per centum of alumina and more than three-tenths of 1 per centum of ferric oxide carry a duty of three-tenths of 1 cent per pound; that alum, alum cake, patent alum, sulphate of alumina, and aluminous cake, containing more than 15 per centum of alumina or not more than three-tenths of 1 per centum of ferric oxide carry a duty of three-eighths of 1 cent per pound.

Under the tariff of 1913 imports of alumina sulphate would doubtless have increased materially but for the war, during which, of course, importations ceased entirely and have not as yet been resumed to any extent by reason of abnormal conditions that have prevailed abroad. It is reasonable to expect, however, that from now on European manufacturers will use every effort to dump their surplus product in this market and at prices so low as to hamper American manufacturers. The situation is further aggravated by reason of exchange conditions now existing.

The manufacture of alumina sulphate is a business of much importance in this country and there are numerous makers located in various sections of the United States. The chief raw materials employed in its manufacture are bauxite, which is both of foreign and domestic origin, and sulphuric acid, which is produced in this country.

Competition in this industry has always been very keen, and at times selling prices are so low as to admit of no profit save to concerns having unusually favorable location with respect to the consuming market.

Our reason for asking that a higher duty on one grade of sulphate of alumina than another is that the cost of the product low in alumina and high in ferric oxide is less than for the grades higher in alumina and low in ferric oxide.

As a result of the war, the manufacture of sulphuric acid in Europe has been greatly increased and this country is a natural dumping ground for this product. Alumina sulphate is a natural vehicle for carrying sulphuric acid and we deem the 15 per cent ad valorem duty as provided in the act of 1913 inadequate to protect our industry and, therefore, pray that the duties already requested be made effective.

S. W. WILDER, *President.*

AMMONIA.

[Paragraphs 5 and 7.]

WILLIAM H. BOWER, OF THE HENRY BOWER MANUFACTURING CO., PHILADELPHIA, PA.

Mr. BOWER. William H. Bower, Henry Bower Chemical Manufacturing Co., manufacturers of heavy chemicals, Philadelphia, Pa. I also represent the Mutual Chemical Co. of America, with factories at Baltimore and Jersey City.

I have prepared a brief which I will file. On paragraph 7, which covers ammonia, I wish to recommend that the comments on this tariff investigation surely be carried out as to the rates on the different articles. The rates are not equitable. Under paragraph 7, ammoniacal gas liquor is dutiable at 10 per cent ad valorem, aqua ammonia at 15 per cent ad valorem, under paragraph 5; and anhydrous ammonia under paragraph 7 at 2½ cents per pound. Calculated to a specific rate per pound of ammonia, ammoniacal gas liquor is 1 cent per pound, aqua ammonia 3 to 3½ cents per pound. Anhydrous, calculated as an ad valorem, taking the present domestic price, would be 7.10 per cent. When that schedule was made, in 1909, it was figured out that the rate should be equitable and the duty 20 per cent under paragraph 480 was placed on ammoniacal gas liquor; aqua ammonia was 25 per cent, and they figured out about 25 and anhydrous ammonia 5 cents a pound.

It is a very necessary article in the cold-storage industry of the country. The cold-storage industry of the country depends on ammonia.

The CHAIRMAN. Those rates were satisfactory then?

Mr. BOWER. Yes, sir.

Mr. LONGWORTH. Where is your principal competition?

Mr. BOWER. There is no competition in this article. The American anhydrous ammonia is the standard throughout the world and there is practically no importation, but we are exporters and have been since the manufacturing of anhydrous ammonia began.

Mr. RAINEY. What do you want a tariff for then, if you have got no competition anywhere in the world?

Mr. BOWER. Because it is coming; it will be coming now.

Mr. OLDFIELD. We did not have any in 1909?

Mr. BOWER. It is, I know, on the way now.

Mr. OLDFIELD. How about the year 1909? Was competition coming then?

Mr. BOWER. Yes, sir.

Mr. OLDFIELD. It has not got here yet?

Mr. BOWER. Yes, sir; it did, in 1918; but there was importation in 1918 of anhydrous ammonia, and there is importation now of aqua ammonia.

Mr. LONGWORTH. From what country—Germany?

Mr. BOWER. Canada.

Mr. LONGWORTH. You have no competition from Germany?

Mr. BOWER. No.

Mr. RAINEY. You have been threatened with competition for 11 years, and it has not come; yet in 1909 you got a tariff because you wanted to protect yourself in the future.

Mr. BOWER. Not future.

Mr. RAINEY. You got a tariff in 1909?

Mr. BOWER. There always has been competition.

Mr. RAINEY. You got a tariff in 1909, and there never has been any competition?

Mr. BOWER. Yes; there has been competition in aqua ammonia.

Mr. RAINEY. Where was there competition from?

Mr. BOWER. From Canada.

Mr. RAINEY. How long has there been competition?

Mr. BOWER. There always has been.

Mr. RAINEY. But you just stated that the American ammonia was the standard.

Mr. BOWER. Yes; of anhydrous ammonia.

Mr. RAINEY. Anhydrous ammonia, I know. You are asking for a tariff, too?

Mr. BOWER. Yes, sir.

Mr. RAINEY. You have not got a particle of competition.

Mr. BOWER. But it is coming. We see it coming, and I say it is on the way now.

Mr. RAINEY. In 1909 it was coming, too. It did not come, yet you got a tariff in 1909.

Mr. BOWER. I do not know about the tariff of 1909.

Mr. RAINEY. Did you get a tariff in 1909?

Mr. BOWER. I was not in it; I was not in the industry.

Mr. RAINEY. Competition has been delayed 11 years, still you are afraid of it.

Mr. LONGWORTH. Well, you had some in 1918?

Mr. GREEN. There is not very much coming in now?

Mr. BOWER. No; because they are not manufacturing it yet.

Also, under paragraph 64 of the tariff act of 1913 bichromate of potash is covered. I also represent the Mutual Chemical Co., which manufactures bichromate of potash. I wish to have that retained—those rates retained.

Mr. RAINEY. Have you any competition there?

Mr. BOWER. Yes, sir; you mean foreign competition?

Mr. RAINEY. Yes.

Mr. BOWER. Not much; now, I do not know what——

Mr. RAINEY (interposing). Did you ever have any foreign competition?

Mr. BOWER. Oh, my; yes, indeed.

Mr. RAINEY. When did you have any foreign competition?

Mr. BOWER. Well, ever since I was—we started in the business sometime about 1883. I am speaking of myself. In 1883 I think it was. There has always been some foreign competition, first from Scotland and then from Scotland and Germany.

Mr. RAINEY. I thought you said awhile ago you did not have any competition?

Mr. BOWER. Now; no, sir. No, sir; in these abnormal times.

Mr. RAINEY. But, after 9,000,000 workers have been killed in Europe, you are afraid of 9,000,000 graves?

Mr. BOWER. No, I do not think you should——

The CHAIRMAN (interposing). I did not understand that graves were to be brought into the report.

Mr. BOWER. I can not reply to that question, sir.

We are asking for the same duty as under the act of 1913 and I want to call your attention to that.

Mr. RAINEY. You say you have competition there?

Mr. BOWER. Yes, sir.

Mr. HAWLEY. About the same as in 1913?

Mr. BOWER. About the same.

Mr. RAINEY. Why don't you ask for more?

Mr. LONGWORTH. If he does not ask for more, why encourage him to ask for more?

The CHAIRMAN. In other words, he criticizes him for asking for what he is asking for and then the next minute criticises him for not asking for more.

Mr. HAWLEY. Have you made any investigation to determine the cost of the product abroad and the cost of producing it here?

Mr. BOWER. No, sir; we have tried to make it, but it would be impossible.

The CHAIRMAN. Mr. Bower, you have occupied 10 minutes.

Mr. BOWER. I desire to file these briefs, one for the Henry Bower Chemical Manufacturing Co., and the other for the Mutual Chemical Co.

BRIEF OF HENRY BOWER CHEMICAL MANUFACTURING CO., PHILADELPHIA, PA.

SIR: This statement, presented by the Henry Bower Chemical Manufacturing Co., of Philadelphia, Pa., manufacturers of aqua and anhydrous ammonia, also represents the views of the National Ammonia Co., of St. Louis and Philadelphia, who also manufacture these articles.

Under the act of 1913 ammoniacal gas liquor is dutiable at 10 per cent ad valorem under paragraph 7; aqua ammonia at 15 per cent ad valorem under paragraph 5; anhydrous ammonia under paragraph 7 at 2½ cents per pound. Ammoniacal gas liquor, or concentrated ammoniacal liquor, is the basic raw material used in the manufacture of aqua and anhydrous ammonia. We would ask for a revision of the 1913 rates, which are not equitable. Calculated to a specific rate per pound of ammonia, ammoniacal gas liquor 1 cent per pound; aqua ammonia 3 to 3½ cents per pound. Anhydrous, calculated as an ad valorem, taking the present domestic price, would be 7.10 per cent. We would ask that the rates levied under the act of 1909 be restored on these articles, namely:

Ammoniacal gas liquor, under paragraph 480, 20 per cent.

Aqua ammonia, under paragraph 3, 25 per cent.

Liquid anhydrous ammonia, under paragraph 5, 5 cents.

We would also suggest that aqua ammonia be transferred from the nonenumerated paragraph to a paragraph covering ammonia and its products at a specific rate of 1½ cents per pound; liquid anhydrous ammonia, 5 cents per pound. This would show a duty per pound of ammonia in ammoniacal gas liquor of 2 cents; of aqua ammonia

5 cents, and a calculated ad valorem for liquid anhydrous of about 14 per cent to 15 per cent.

The ammonia industry is an important one in this country, and serves the refrigerating trade by which our foodstuffs are stored and preserved.

WILLIAM H. BOWER, *President*.

CARBONATE OF AMMONIA.

[Paragraph 7.]

BRIEF OF THE AMERICAN AGRICULTURAL CHEMICAL CO., DETROIT, MICH.

In connection with the revision of the chemical schedule of the present tariff we would call your attention to carbonate of ammonia, an article of our manufacture, and would respectfully request a duty of 2½ cents per pound on this commodity.

Carbonate of ammonia is used largely in the baking of sweet goods. The present price ranges from 12½ to 13½ cents per pound, and the consumption is in such small quantities that any additional cost to the consumer would be insignificant.

A large capital investment for plant is required for the production of carbonate of ammonia.

In the past it has been only with the greatest difficulty that we have been able to compete with foreign manufacturers, and under present conditions it will be quite impossible to do so unless we have the protection which is so earnestly requested. Foreign labor is paid a very much lower wage, and labor is a very considerable element in the productive cost of carbonate of ammonia.

JAS. J. O'LEARY, *Local Treasurer*.

ARGOLS.

[Paragraph 8.]

WILLIAM L. VOIGHT, REPRESENTING THE TARTAR CHEMICAL WORKS, NEW YORK CITY.

Mr. VOIGHT. Paragraph 8. Argols, or crude tartar, or wine lees, cream of tartar, tartaric acid.

In the Underwood-Simmons tariff law certain inequalities were enacted between the duties on crude material (argols, lees, etc.) and those on the articles produced therefrom (cream of tartar and tartaric acid), all as stated under paragraph 8 in the summary of tariff information, published in 1920 and elucidated by statistics in Tariff Information Series 13, published by the United States Tariff Commission in 1919.

The concluding reviewing part of paragraph 8, page 24, of the above-mentioned summary of tariff information, shows clearly these inequalities and also indicates the necessity of higher duties on the manufactured products if our industry (the manufacture of cream of tartar and tartaric acid) is to continue in our country.

As is well known to your body, the wages paid in our industry, based on current rates of exchange, are from six to ten times as large as those paid in England, France, Germany, or Italy.

While it is true that rates of wages have advanced a great deal in the moneys of the respective countries since the beginning of the war, the actual wages paid on a gold basis, or exchange value of the United States dollar, show that the daily average wage has actually been reduced and is only two-thirds to three-fourths of that paid before the war.

For instance, in Germany in 1913 the average workingman's wage in chemical factories similar to ours was from 4 to 6 marks, with an

exchange value of 23.8 cents per mark, making the daily wage return 95 cents to $1.43. To-day the wages are from 50 to 75 marks, with an approximate value of about $1.40 per 100 marks, or 70 cents to $1.05 per day. Our labor costs have been tripled. This difference in labor costs is also reflected in the increased cost of every machine, utensil, supply, etc., entering into manufacturing.

For this reason principally, as well as other advantages enjoyed by the European manufacturer, we respectfully request that the specific duty of 2½ cents per pound on cream of tartar and 3½ cents on tartaric acid be increased by an additional duty of 20 per cent ad valorem.

Recognizing that the country needs revenue, we do not ask for a reduction in the duty on crude material—argols, lees, etc.

If, for reasons of revenue, crude material duty be advanced, a corresponding increase should be made in the increase of duty on the manufactured products.

Italy and Spain charge export duty on crude materials and all European manufacturing countries, except England, have a protective duty on the manufactured products.

Owing to the advantages above enumerated, enjoyed by the foreign manufacturers, importations of tartaric acid have increased from about 79,000 pounds in 1913 to over 1,600,000 pounds during 1920, at present selling same much below our cost of production.

These heavy importations, selling at lower than our cost on account of these conditions, have compelled us to reduce our output to about one-third and unless relief is granted we would be compelled to close our plant here entirely.

We have been in business over 40 years. Capital employed at our works, over $2,000,000; and our annual disbursements for pay roll and other expenses are over $1,000,000.

For the above explained reasons we consider that our request to advance the duties on the manufactured product 20 per cent ad valorem and leaving the duty on crude material at 5 per cent ad valorem, a competitive equalization is created, allowing us under careful management to continue manufacturing in this country.

Mr. LONGWORTH. Generally speaking, what part of your cost is labor?

Mr. VOIGHT. That is so hard to say on account of the fluctuating cost of materials. Now, if we have a cost of crude material of 30 cents our labor would be no more than say, 15 cents; if the material is 15 cents, and the labor costs the same, in one case it would be 50 per cent and in the other case 100 per cent.

Mr. LONGWORTH. You say the cost of managing the business is $1,000,000 a year?

Mr. VOIGHT. No, the amount of our disbursements are $1,000,000 a year.

Mr. GARNER. You certainly have a better statistical position than some of these gentlemen who are asking for a tariff on account of fear.

Mr. VOIGHT. Oh, yes; we have shut down our works two-thirds to-day. We can not manufacture because there are inequalities in the present bill.

Mr. GARNER. What is the percentage of imports to consumption in this year?

Mr. VOIGHT. The imports last year, 1920, should be about 40 per cent of the consumption.

Mr. RAINEY. About how many men do you employ?

Mr. VOIGHT. About 300.

Mr. RAINEY. How many have recently been thrown out of employment?

Mr. VOIGHT. We have discharged practically 50 per cent.

Mr. RAINEY. Then you have about 150?

Mr. VOIGHT. Yes, sir.

Mr. RAINEY. Are you the only manufacturer?

Mr. VOIGHT. No, sir; all the details are given by the Tariff Commission.

Mr. RAINEY. Including the number of men employed?

Mr. VOIGHT. No; I think not. But that has been given by the Department of Commerce.

Mr. RAINEY. Do you know how many men are in the whole industry?

Mr. VOIGHT. I should say about 1,000.

Mr. COPLEY. You must have some general notion what percentage of your yearly cost is for labor. Would it be 10, 15, or 20 per cent?

Mr. VOIGHT. I should say 25 to 40 per cent.

Mr. COPLEY. I want to bring out another point on that: The balance goes into your raw material?

Mr. VOIGHT. Yes, sir.

Mr. COPLEY. Your raw material itself is the product of labor, all the way until it comes to you?

Mr. VOIGHT. The raw material in our industry, of course, is the result of labor; it is a by-product of the wine industry.

Mr. COPLEY. And it is a product of labor?

Mr. VOIGHT. Oh, certainly, but we import 98 per cent of our material; 98 per cent of our material is imported.

Mr. COPLEY. The labor costs all the way to you from the man that plows the ground?

Mr. VOIGHT. Yes, sir.

Mr. HAWLEY. Where will you get your raw material now since the passage of the prohibition law?

Mr. VOIGHT. The United States production doesn't play any important part in that. We never got more than 1 per cent of it here. France has 40 times as much.

Mr. HULL. How about the grape juice?

Mr. VOIGHT. That would not keep our factory going four hours.

BRIEF OF TARTAR CHEMICAL WORKS, ROYAL BAKING POWDER CO., NEW YORK, CITY.

ARGOLS OR CRUDE TARTAR, CREAM OF TARTAR, AND TARTARIC ACID.

SIRS: In the Underwood-Simmons Tariff Law certain inequalities were enacted between the duties on crude material (argols, lees, etc.) and those on the articles produced therefrom (cream of tartar and tartaric acid), all as stated under paragraph 8 in the Summary of Tariff Information, published in 1920 and elucidated by statistics in Tariff Information Series 13, published by the United States Tariff Commission in 1919.

The concluding reviewing part of paragraph 8, page 24, of above-mentioned Summary of Tariff Information, shows clearly these inequalities and also indicates the necessity of higher duties on the manufactured products if our industry (the manufacture of cream tartar and tartaric acid) is to continue in our country.

As is well known to your body, the wages paid in our industry, based on current rates of exchange, are from six to ten times as large as those paid in England, France, Germany, or Italy.

While it is true that rates of wages have advanced a great deal in the moneys of the respective countries since the beginning of the war, the actual wages paid on a gold basis, or exchange value of the United States dollar, show that the daily average wage has actually been reduced and is only two-thirds to three-fourths of that paid before the war.

For instance, in Germany in 1913 the average workingman's wage in chemical factories similar to ours was from 4 to 6 marks, with an exchange value of 23.8 cents per mark, making the daily wage return 95 cents to $1.43. To-day the wages are from 50 to 75 marks, with an approximate value of about 1.40 per mark, or 70 cents to $1.05 per day. Our labor costs have been tripled. This difference in labor costs is also reflected in the increased cost of every machine, utensil, supply, etc., entering into manufacturing.

For this reason principally, as well as other advantages enjoyed by the European manufacturer, we respectfully request that the specific duty of 2½ cents per pound on cream of tartar and 3½ cents on tartaric acid be increased by an additional duty of 20 per cent ad valorem.

Recognizing that the country needs revenue, we do not ask for a reduction in the duty on crude material, argols, lees, etc.

If, for reasons of revenue, crude material duty be advanced, a corresponding increase should be made in the increase of duty on the manufactured products.

Italy and Spain charge export duty on crude materials and all European manufacturing countries except England have a protective duty on the manufactured products.

Owing to the advantages above enumerated, enjoyed by the foreign manufacturers, importations of tartaric acid have increased from about 79,000 pounds in 1913 to over 1,600,000 pounds during 1920—at present selling same much below our cost of production.

These heavy importations, selling at lower than our cost on account of these conditions, have compelled us to reduce our output to about one-third and unless relief is granted we would be compelled to close our plant here entirely.

We have been in business over 40 years. Capital employed at our works over $2,000,000 and our annual disbursements for pay roll and other expenses are over $1,000,000.

For the above explained reasons we consider that our request to advance the duties on the manufactured product 20 per cent ad valorem and leaving the duty on crude material at 5 per cent ad valorem, a competitive equalization is created, allowing us under careful management to continue manufacturing in this country.

WM. C. VOIGT, *Manager.*

BRIEF OF HARSHAW, FULLER & GOODWIN CO., CLEVELAND, OHIO.

CREAM OF TARTAR, TARTARIC ACID, AND ROCHELLE SALTS.

We are manufacturers of cream of tartar, tartaric acid, and rochelle salts. Our factory is located at Elyria, Ohio. Our raw materials are argols, or crude tartar, and tartrate of lime. Argols and tartrate of lime are now dutiable under paragraph 8, at 5 per cent ad valorem. Prior to the tariff act of 1913 no specific provision was made for a duty on tartrate of lime, but it should be provided for as in the tariff act of 1913 at same rate as argols. If any increase is made in the duties on argols and tartrate of lime a compensating increase should be made in duties desired on cream of tartar, tartaric acid, and rochelle salts.

The present duty on cream of tartar is 2½ cents per pound under paragraph 8. This is absolutely insufficient. In order that we may continue operations, we desire a duty of 2½ cents per pound and 25 per cent ad valorem.

The present duty on tartaric acid is 3½ cents per pound under paragraph 1. This is also insufficient, and to enable us to continue operations we desire a duty of 3½ cents per pound and 25 per cent ad valorem.

Rochelle salts at present are dutiable under paragraph 8, at 2½ cents per pound. This is also insufficient, and to continue operations we desire a duty of 2½ cents per pound and 25 per cent ad valorem.

W. A. HARSHAW, *President.*

BARIUM.

[Paragraphs 10 and 143.]

MAXIMILIAN TOCH, DUREX CHEMICAL CORPORATION, NEW YORK CITY.

Mr. TOCH. Mr. Chairman and gentlemen, it may be opportune for me to explain to you what the barium compounds or barium chemicals are. The barium chemicals are practically new in the United States, never having been manufactured here prior to 1914. The word "barium" is derived from the Greek "baros," which means heavy. Perhaps some of you have picked up a piece of very heavy mineral, and there is not any mistake as to what this mineral is when you pick it up. It is equally as heavy as lead. It has been one of the most despised materials in the mineralogical history of the world, for the reason that it was as heavy as lead. Its only use for many years was to adulterate white lead. Chemical science, however, has developed from this very much despised material certain chemicals which had a great influence on the winning of the war. I do not mean to say that any one material did win the war, but barium chemicals entered very, very largely into it.

When this mineral is mixed with coal and burned to a white heat it decomposes, and from that ash a large line of other important chemicals are made. First is the chemical called barium carbonate. This ash is mixed with soda ash and carbonate of barium is the result, and this chemical is of tremendous value in the arts. For instance, in 1917 there was a feverish excitement throughout the United States, when the United States advertised all over for photographic lenses, optical glass—"for goodness' sake, come and sell us what you have; we need it for range finders, we need it for sextants, we need it for all sorts of optical purposes, because nobody had made optical glass in this country." Germany had supplied the world with optical glass, and the Germans ha-haed and said, "We would like to see the Americans make carbonate of barium; we would like to see them make optical glass." But let it be said to the credit of American chemists, we made chemically pure barium carbonate, turned out 60,000 pounds in record time, which was used in the manufacture of optical glass for use in range finders, photographic lenses, and all sorts of optical glass, all of which will be substantiated by the Bureau of Standards.

Barium carbonate has also another very tremendous value for household use. Barium carbonate is perhaps the best and most efficient rat poison that has ever been discovered. The Department of Agriculture has issued a pamphlet on that, because the rat, in eating barium carbonate, gets a tremendous thirst and runs out and never dies in the rat hole. That is a physiological fact.

Barium carbonate has another tremendous value in the manufacture of barium chloride. That is one of the items that has been made in this country out of this old despised rock.

I might here interpose to say I am the accredited representative of the barium chemical manufacturers of the United States, but I will not talk to you about the other chemicals, because I think to-morrow morning perhaps Mr. Delore, of Missouri, will touch on that topic. I could not hope to do justice to both in 10 minutes.

Barium chloride has been used for many years and is made by mixing the carbonate with muriatic acid. It is used as a mordant for a large number of aniline dyes, both in dyeing and in color making, and is therefore an essential in the dye industry.

The next important chemical made out of barytes is precipitated barium sulphate, which is the same composition as the mineral itself, but there is the same difference as there is between charcoal and diamonds—both being chemically the same but physically different. The tariff should differentiate between the artificial sulphate, precipitated, and the natural sulphate of barytes.

Now, of this barium sulphate, throughout the war some 4,000,000 pounds were used for United States battleship gray. The United States Government since 1912 has been painting its ships with 45 per cent of this material for physical reasons. It is nonpoisonous. It is more waterproof and it does not decompose. This material also is of tremendous value in the manufacture of paper. You can not pick up a fine magazine or book on which there is a halftone print, when you see that beautiful glaze, without putting your hand in contact with the precipitated barium sulphate.

A third, and perhaps most important, use is in the manufacture of automobile tires. There was a time when automobile tires would only run from 2,500 to 3,000 miles, according to their guaranty. Suddenly manufacturers guranteed from 5,000 to 8,000 miles. Sixty per cent of this very despised mineral in chemical form was added to an automobile tire, and thousands of tons have been used for that particular industry.

Then comes another very important material that is made, which is called peroxide of barium, in which the chemical is so changed that it can be converted into peroxide of hydrogen, and every one of you gentlemen, probably, in your bath room at home has a bottle of peroxide of hydrogen which is made of this material that had never been made in the United States prior to 1914. I mention this to you to show you the very great importance of this industry, and while I do not want to take up too much of your time in this discussion, I would like to say that a great many million dollars have been invested in this industry in the United States. I do not want to say how many because I do not know the exact amount, and therefore only want to state the facts; but the barium manufacturers of the United States are facing either ruin or else a total wiping out of their industries unless we can obtain not only a tariff but some interim legislation, for Germany in the last six months has shipped over here—I won't say dumped, because I can not prove it—has shipped over here thousands of tons of these chemicals at prices which we can not compete with.

There is no necessity for me to talk economics to you, but when the German laborer can get from 40 to 60 marks per day, which is a tremendous amount of money for him over there, as compared with from $4 to $6 a day which we have to pay our men here, you can see that the relative economic difference is such that we can not hope to compete with them without protection.

Mr. LONGWORTH. Which is the largest raw material?

Mr. TOCH. The heavy mineral. The barium sulphate.

Mr. LONGWORTH. What is the difference between that and witherite?

Mr. TOCH. Witherite is the carbonate of barium. That is not the sulphate. It is only found in very small quantities on the west coast of the United States.

Mr. GARNER. Where do you get your raw material?

Mr. TOCH. We own our mines in Tennessee. The State of Missouri has millions of tons. Georgia produces an enormous quantity, and Kentucky and Virginia also produce tremendous quantities, and there are undiscovered, or rather tremendous, fields and large deposits in the State of Texas, which some day or other are going to come to life, provided we are able to compete with other countries.

Mr. LONGWORTH. Then there is no trouble about your raw material?

Mr. TOCH. Absolutely not.

Mr. LONGWORTH. It is the conversion of that raw material into the finished product in which you have difficulty in competition?

Mr. TOCH. Oh, yes. As soon as labor enters and mechanical appliances, we can not compete with foreign countries.

Mr. HULL. Are any patent rights held by anybody in this country on the processes?

Mr. TOCH. No, sir; none at all.

I would like to say, before my time is up, that Mr. Rhodes, in July, 1919, introduced a bill, H. R. 7658, proposing a duty on the barium compounds of $10 a ton for ore, and $11.20 a ton for pulverized, and then about $20 a ton for the chemicals. Things have changed since then. While the ore and ground material should be protected in that amount—and Mr. Rhodes is not here to-day, but I say this knowing that he will agree with me, because I mentioned it to him some time ago—the first duties which were placed on the chemicals were insufficient, and of course anybody who understands the relative difference will agree that that is the fact. But it is up to you gentlemen to determine whether we are going to be fellows to a prince or brother to a beggar, and it looks to me that we will be the latter unless we get interim legislation and immediately thereafter, as soon as possible, protection which will enable us to live. We do not ask for unreasonable protection, but simply want protection which will enable us to compete. As soon as we get that our industry will survive again or revive.

To-day there is, to the best of my knowledge, not a single barium chemical plant in the United States that is operating.

Mr. LONGWORTH. Have you any specific recommendation to make?

Mr. TOCH. As to the amount of the duty?

Mr. LONGWORTH. Yes.

Mr. TOCH. I should say from 2 cents to 10 cents a pound, depending upon the chemical.

I have no brief prepared, but I should like to have some time, if it is possible, to send one in to you, and to have opportunity to confer with the rest of the manufacturers as to the proper amount of duty that we ought to have.

The CHAIRMAN. We would be very glad to have that.

Mr. LONGWORTH. May I ask which of these, chloride of barium, carbonate of barium——

Mr. TOCH. And nitrate of barium.

Mr. LONGWORTH. Which is the least expensive? Chloride?

Mr. TOCH. No. Chloride and carbonate would cost about the same.

Mr. LONGWORTH. Under the present law there is a quarter of a cent a pound on chloride and 1½ cents a pound on carbonate. You say they cost about the same?

Mr. TOCH. Oh, no; I beg your pardon. Dioxide is the 1½.

Mr. LONGWORTH. Oh, yes.

Mr. TOCH. But we can not use an ad valorem duty. We must have a specific duty, on account of the relative difference in the money value.

Mr. LONGWORTH. You start——

Mr. TOCH. We would start with the ore at $10 a ton, with the ground at $20, and then with the chemicals.

Mr. LONGWORTH. Take chloride, for instance? You say 2 cents a pound?

Mr. TOCH. Chloride, 2 cents a pound.

Mr. LONGWORTH. The same for carbonate?

Mr. TOCH. The same for carbonate, and the same for precipitated sulphate.

Mr. LONGWORTH. Then, what would your highest be?

Mr. TOCH. The higher ones would be dioxide and the nitrate.

Mr. LONGWORTH. And what do you say about those?

Mr. TOCH. The dioxide ought to run up close to 10 cents a pound, because an enormous amount of money has been put into that, and better dioxide is made in this country than has been made abroad. That is the most encouraging part of this whole thing, that the barium chemicals made in America are far superior to those made abroad. They can not touch us on carbonate, because our process is different. They make carbonate in a different way than we do. In the manufacture of those we have the by-product called sodium sulphide. Mr. Howard touched on that this morning. That is an indirect product of barium. That is used for dehairing hides, for sulphur aniline black, and for sulphur brown. So the industry itself is of tremendous importance.

Mr. GARNER. Where is the raw material in Europe produced?

Mr. TOCH. In the Harz district of Germany. Right on the river. They chute the ore down onto barges and then ship it over to their factories, one of which is right close at hand, and others of which are in Holland and various parts of Germany.

Mr. RAINEY. Is the ore of the same quality there as here?

Mr. TOCH. No; it is a different ore. We have in Tennessee, for instance, what is known as a decrepitating ore. That means as you put it in the fire it splits apart. That is a very important thing. Our ore is excellent. Their ore is purer than ours, but harder.

Mr. LONGWORTH. Your cost of conversion is similar, then?

Mr. TOCH. The cost of conversion is about the same. There is no difference. It is the cost of the labor and the cost of materials which we use in conversion that makes ours cost so much more.

Mr. GARNER. If we could ascertain the difference in the cost of production of the ore here and in Germany, and that rate was fixed, would that be sufficient?

Mr. TOCH. Absolutely. If the German chemicals were the same price as our chemicals, I would guarantee that they would not get a look-in, because their quality does not compare with ours now.

Mr. GARNER. You make a better quality, then?

Mr. TOCH. Absolutely.

Mr. GARNER. All you ask is a rate of duty that will equalize the cost of production here and in Germany or Europe?

Mr. TOCH. Exactly; but you must bear this in mind, that when you do that the mark may go from $1.35 down to $1 again, and we want to have a duty that is going to protect us against such a decline.

Mr. GARNER. And, on the contrary, it may go up some, from 2 to 3.

Mr. TOCH. Well, perhaps your vision in that matter is better than mine.

Mr. GARNER. No; I did not suggest it. I said it might be so. I don't think anybody can determine at this time just what the result of exchange is going to be.

Mr. TOCH. If you will allow me, any country that is on a printing-press basis—not on a paper-money basis, but on a printing-press basis—is not likely to have its money increase in value, but rather likely to have it decrease.

The CHAIRMAN. On the gold value, there is no possibility of their money going higher than ours, and if you base that value on the gold dollar value you would have it correct, would you not?

Mr. TOCH. You would not unless you had the same equalization in wages.

The CHAIRMAN. No: I am not speaking now about the question of duty, but the value of the money, the exchange value of the money.

Mr. TOCH. If the exchange value of the money were alike.

The CHAIRMAN. If you base any import values upon our gold value and not their mark value——

Mr. TOCH. We would have the advantage.

The CHAIRMAN. You have got your cost in gold over here, have you not?

Mr. TOCH. Yes, sir.

The CHAIRMAN. There is no possibility of their mark going higher than our gold?

Mr. TOCH. No, sir.

The CHAIRMAN. So that if you put their value upon our gold value, then they are correct?

Mr. TOCH. Yes, sir; that is correct.

BRIEF OF THE BARIUM PRODUCERS AND MANUFACTURERS OF THE UNITED STATES.

The barium producers and manufacturers of the United States is a body organized in December, 1919, numbering among its members the foremost miners of barite ore and manufacturers of barium products in the United States.

The barium industry of the United States comprises the mining of barite ore and the washing and grinding of this ore to form ground barytes, and the manufacture from the ore, in conjunction with coal, of a large line of chemicals, these chemicals not having been made in the United States prior to 1914.

As stated verbally before your committee on January 6, this brief will not touch on the subject of crude barium ore and ground barytes, for the reason that Mr. C. P. DeLore, of the J. C. Finck Mineral Milling Co., of St. Louis, Mo.; Mr. A. E. Stocking, of the Missouri Barytes Lithopone Association, of St. Louis; and Mr. W. S. Peebles, of the barytes producers of Georgia, have taken up this part of the industry separately.

However, the specific duties mentioned in the bill introduced by Mr. Rhodes in July, 1919 (H. R. 7658) of $10 a ton for ore and $20 a ton for the ground or pulverized barytes seem to be fair, and should not prevent imports into the United States

The barium chemical industry is of great importance in the arts, and we shall briefly outline the most important barium chemicals made in the United States.

The ore is taken and roasted with coal, and from this roast, technically known as black ash, a large line of important barium chemicals is manufactured, as follows:

Barium carbonate.—Barium carbonate has four very important uses: (1) In the manufacture of white porcelain and other tiles; (2) in the manufacture of optical glass; (3) as a rat and vermin poison; (4) in the manufacture of peroxide of barium, which will be described later.

The duty on this material should be 2 cents per pound.

Barium chloride.—This material is made in two ways: First, by mixing barium carbonate with muriatic acid; second, by extracting the black ash with the same acid. Its uses are (1) as a mordant in dyeing; and (2) as a precipitant in color making. Many thousands of tons are used for this purpose.

The duty on barium chloride should be 2½ cents per pound.

Barium sulphate (artificial).—This material is of great importance also in four ways: (1) In its dry state it is of paramount importance in the paint industry, 4,000,000 pounds having been used during the war by the United States Government alone in the painting of its battleships. Forty-five per cent of barium sulphate enters into the composition of the paint. It has particular physical qualities which recommend it when mixed with other pigments; (2) as a reinforcing pigment for rubber tires; (3) as a glaze for very high-grade lithographic paper; (4) as a coating for photographic paper.

The duty on this should be 2 cents per pound.

Barium sulphide.—Barium sulphide is either (1) the ore burned with coal, and contains about 60 per cent of water soluble material; or (2) it is the extracted material in yellow crystal form.

Within the past few years it has been found that when this roast, or black ash, is mixed with phosphate rock it forms a fertilizer of particular value; and, whereas none of this material was used a few years ago, several thousand tons of it were used last year in the United States alone.

The duty on barium sulphide should be 1½ cents per pound.

Barium nitrate.—Outside of its use for green fire in fireworks and for the manufacture of peroxide of barium, barium nitrate is strictly a war material, and large quantities of it were used during the war.

At this writing, barium nitrate is being offered and imported into the United States at below the cost of manufacture, and should be assessed at 5 cents per pound.

Barium peroxide.—This material is made either out of the carbonate or out of the nitrate, and its importance can not be overestimated, for from it peroxide of hydrogen is manufactured. During the war a great many hundred tons were used both for tracer bullets and for other pyrotechnical purposes, and it is a very difficult material to make. It should be protected with a duty of 8 cents per pound.

In the manufacture of barium carbonate and barium sulphate, precipitated, the sulphur in the burned barytes goes over to the soda and forms sulphide of soda. This is a new method for the manufacture of sulphide of soda, and yields a very pure soda sulphide. It has an important use in the dehairing of hides and in the manufacture and dyeing of brown and black anilines.

There are two types—one, the crystalline, which contains 30 per cent sodium sulphide, and the other the concentrated, which contains 60 per cent—and the tariff should differentiate between the two, placing a duty of 1½ cents per pound on the crystals and 2½ cents per pound on the concentrated.

Although this is not, strictly speaking, a barium chemical, it is, however, directly derived from barytes.

There are a number of other barium chemicals which, however, are not of sufficient importance to warrant their manufacture on a large scale, such as barium sulfocyanide, barium cyanide, barium chlorate, barium chromate, etc. All these barium compounds, or barium salts, should be dutiable at 25 per cent ad valorem, but the value should in every case be 25 per cent of the American value.

In times gone by Austria was a factor in certain barium chemicals, made principally out of the native carbonate or witherite, a mineral not found in its pure state in the United States. When this mineral is mixed with muriatic or other acids, barium salts can be simply made which compete very strongly with the American more costly methods. This mineral witherite should be dutiable at 1 cent per pound.

Our association has no exact knowledge of the ratio between the pay of the German and Austrian workmen and the American workmen, but it is conceded that the figures given by the Department of Commerce—that the German workmen receive between 40 and 50 marks per day—is correct

It is therefore essential that in establishing the duty the economic difference between American gold and European paper money should be taken into consideration.

Too much stress can not be laid on the fact that interim legislation is essential at this time, for Germany has within the last six months shipped over here such enor-

mous quantities of barium chemicals at below the American cost of manufacture that at this writing there is not a single barium chemical plant in operation. This means that the workmen are thrown out of employment, capital is tied up, and, unless speedy relief is forthcoming, ruin may be the result.

In urging remedial legislation, the members of this association are not seeking, selfishly, the exclusion of imports, but we are seeking a basis of equality which will admit of fair competition with goods of foreign manufacture, rather than being compelled, as under present tariff regulations, helplessly to submit to the loss of our invested capital, amounting to millions of dollars, by reason of the ruinous prices at which the foreign materials are allowed entry into the United States, with which prices it is utterly impossible for the American miners and manufacturers of barium products to compete.

In fixing the tariff rates, American labor should not be lost sight of, and it should receive adequate protection against the present low European standard of wages.

For many years there has been a great deal of talk about a scientific tariff; and while it is likely that there are many things which are imported that can not be taken on a basis of value, it seems to us that a duty of so many cents per pound, wherever possible, is a unit of measure from which no dispute can arise.

It is possible that in the enumeration of rare or seldom imported materials, it is best to impose an ad valorem duty. This should by all means, however, be the exception, and a specific duty should be the rule.

This association does not wish to give any cumulative evidence, but respectfully refers you to page 9 of the brief of the Manufacturing Chemists' Association of the United States, which states the case very clearly.

It would seem unnecessary, therefore, for this association to point out to your honorable committee further the urgency of remedial legislation looking to the proper protection of the barium industry in the United States—a necessary infant during the war in our great American family, and which is now seeking a continuance of existence in times of peace. The need for prompt action is obvious.

Attached to this brief is one of the latest foreign price lists on barium chemicals, and if your committee desires further evidence, additional original quotations will be furnished. The Tariff Commission has copies of our cost sheets, but any additional information desired that may be helpful to your committee will be cheerfully and promptly furnished.

The undersigned is prepared to appear before your committee to give such further information as may be necessary.

MAXIMILIAN TOCH, *Chairman*.

AMSTERDAM, *December 22, 1920*.

DEAR SIRS: By the present we beg to offer to you, subject to being unsold, 20 tons nitrate of barium, at $7 per 100 pounds, including casks; 2 tons nigrosine, soluble in water, at $33 per 100 pounds, including package; 10 tons peroxide of barium, with above 80 per cent bariumoxide, at $9.75 per 100 pounds, excluding iron barrels of 10 hundredweight, at $9 each; 20 tons chloride of barium, at $3.75 per 100 pounds, including package; 6 tons yellow prussiate of soda, at $22 per 100 pounds, including package.

All c. i. f. Confirmed bankers' credit to be opened in Holland; payable against documents.

We shall be glad to receive your valued order, and remain, dear sirs,

MAATSCHAPPIJ VOOR CHEMISCHE & METALLURGISCHE PRODUCTEN.

FRANKFURT A. M., *den 14. Dezember, 1920*.

Abteilung: Chemikalien.—Wir bieten Ihnen hiermit freibleibend auf Grund umstehender Bedingungen an: ca. 10 tons Chlorbarium crist. zu M 3.30 per Kilo inkl. Verpackung, franco deutscher Grenze oder fob Ausfuhrhafen mit Ausfuhrgenehmigung, zahlbar: netto Kasse aus unwiderruflichem Accreditiv, das bei Auftragserteilung bei einer Frankfurter Grossbank zu erstellen ist, auszahlbar gegen Dokumente.

Wir hoffen, dass Sie von unserem Angebot Gebrauch machen können und zeichnen in dieser Erwartung.

FARB-UND GERBSTOFF-WERKE,
CARL FLESCH, JR.

AMSTERDAM, *December 15, 1920.*

DEAR SIRS: By the present we beg to offer to you, subject to being unsold, ex stock, per 100 pounds, including bags, casks, and package, for immediate shipment:

30 tons muriate of potash, 50/52 per cent	$4.50
10 tons muriate of potash, 60/62 per cent	5.50
5 tons permanganate of potash	35.00
7 tons carbonate of potash, 96 per cent	11.00
9 tons hydrate of barium	3.00
20 tons chloride of barium	3.25
10 tons barium carbonate	2.75
2 tons ammonium bromide	17.00
5 tons oxalic acid	24.00
5 tons phosphate of sodium	7.50
10 tons bisulfite of sodium, 60/62 per cent	5.50
4 tons sulfite of sodium, crystals	4.00
2 tons sulfite of sodium, powder	4.00
2 tons nigrosine, soluble in water	36.00
5 tons muriate of ammonia, prime white powder	6.50
3 tons carbolic acid, 39/40° crystals	14.00
4 tons talc powder, snowwhite	3.20
15 tons alum of chrome	7.05
10 tons naphthaline in flakes	6.30
5 tons potassium bromide	17.00
5 tons sodium cyanide, 120 per cent	25.00
5 tons cyanide of potash, 98/100 per cent	28.00
6 tons yellow prussiate of soda	24.00
5 tons yellow prussiate of potash	27.00
5 tons red prussiate of potash	49.00
10 tons hyposulfite of soda, ordinary crystals	4.75
10 tons chlorate of potash	10.50
10 tons peroxyde of barium, 80 per cent	10.00
5 tons sugar of lead, white	11.00
5 tons formiate of soda, 92 per cent	10.00

Terms: C. i. f. New York; banker's credit to be opened in Holland, payable against documents.

All contracts are to be understood with reserve of force-majeure, measures of war, industrial disturbances, possibility of transport, and other not foreseen circumstances.

MAATSCHAPPIJ VOOR CHEMISCHE & METALLURGISCHE PRODUCTEN.

CHARLOTTENBURG 2, *December 3, 1920.*

GENTLEMEN: Subject to being unsold and without engagement we beg to offer you for early shipment:

	Marks.
100 tons barium chloride, prime white crystal powder	380
100 tons barium chloride, 98/100 per cent, crystals	412
25 tons arsenic, 98 per cent, white powder, German manufacture	2,000
100 tons blanc fixe, white dry powder	440
100 tons sulphuric acid, 66° B., excluding iron basket balloons to be charged each with mark 110	200
100 tons hydrochloric acid, 19/21° B., free from arsenic, excluding iron basket balloons to be charged each with mark 110	66
10 tons acetate of lead, white crystals	1,450
150 tons calcii chloridum fusum, 70/75 per cent, in wood casks	160
100 tons sulphate of copper, crystals, 98/100 per cent	900
100 tons chloride of zinc, 95 per cent, fusum	850
200 tons amonii chloridum, 98/100 per cent, white crystal powder	850
500 kegs hydrochinon, from stock, free-port Hamburg	160
25 tons nitrate of strontium	1,650
25 tons nitrate of barium	1,075
20 tons bichromate of potash	3,600
20 tons bichromate of soda	2,900

Price per 100 kilos f. o. b. Hamburg, packing included.

Terms: Cash against documents out of confirmed irrevocable credit opened with a German bank.

WALLON & Co.

M. J. RENTSCHLER, REPRESENTING THE J. H. R. PRODUCTS CO., WILLOUGHBY, OHIO.

Mr. RENTSCHLER. Mr. Chairman, I appear before this committee with reference to paragraph 10 of the tariff law of October 3, 1913, the second article mentioned in that paragraph, barium, dioxide of.

Dr. Toch ably presented the cause for the manufacturers of barium and barium products yesterday, and I only desire to add a few words, with reference to barium dioxide itself.

This material was not manufactured in America prior to 1913. Beginning with the year 1917, the company that I represent began producing this material from barium carbonate, barium carbonate being, in turn, derived from barytes as mentioned by Dr. Toch yesterday.

Prior to the war the Germans controlled the barium dioxide industry, because they had a process by which they could manufacture it excessively cheaply for two reasons:

They had an unlimited natural supply of pure carbonic-acid gas; and second, they had factories devoted exclusively to this industry located in the proximity of waterfalls where electric power was very cheap.

During the last two months more barium dioxide has been imported than during the three years prior, and we are to-day facing a crisis where, unless we have almost immediate relief, we shall be compelled to go out of business.

Beginning with the 1st day of December we were obliged to cease operating, due to the fact that foreign quotations and foreign goods are being thrown on the American market, practically regardless of prices.

Briefly, I would like to call your attention to a page of quotations from foreign countries, which I have here with me.

Mr. HAWLEY. Does that appear in your brief?

Mr. RENTSCHLER. I shall see that it does, and I would also like to supply in my brief some letters on this subject.

Mr. BACHARACH. Are they recent?

Mr. RENTSCHLER. Very recent. I would like to ask if we will be permitted to submit a brief on Monday or Tuesday.

Mr. HAWLEY. Yes; that privilege has already been granted.

Mr. RENTSCHLER. We appreciate that very much.

I only wanted to say, in confirmation of what Dr. Toch said yesterday, that the duty be raised from 1 to 5 or 10 cents. We do not ask anything unreasonable, but only ask to be placed in a fair position.

If you find that it is desirable to place a certain duty on barytes or barium products, then, in view of the fact that barium dioxide requires more technical skill than any other barium compound to manufacture, we ask for higher protection. Dr. Toch's figures are thoroughly satisfactory to us, as stated before.

I want to call your attention, furthermore, if I may have a moment, that during the war we were asked by the Frankford Arsenal at Philadelphia to supply them with barium dioxide. We were able to do so. In fact, we paid the transportation from Willoughby to Philadelphia at a loss, and were glad to do so, because it gave us fuel permits whereby we could continue to operate.

As I say, during the last few months these products have been coming in here, and we can not compete with the foreigners, due to exchange. If you will assist us a little, we will promise to take care of the Dutch when the time comes.

Mr. HAWLEY. Do you agree with the former witness as to the disparity in labor costs?

Mr. RENTSCHLER. Yes, sir.

Mr. HAWLEY. You have no further figures to add?

Mr. RENTSCHLER. No, sir; the comparative labor cost is about a 10 to 1 shot to-day. The cost of the raw material is, of course, cheaper. I might say, we could procure barium carbonate to-day in Europe cheaper than we could buy it in this country, but that is not consistent with our policy. We are operating an American company and will secure our material in this country.

Mr. BACHARACH. You consider it a key industry in case of war?

Mr. RENTSCHLER. It certainly is a key industry in peace as well as war, because barium dioxide is used in the manufacture of tracer shells, in connection with potassium permanganate as a means to liberate formaldehyde from formalin, and it is used exclusively for the manufacture of medicinal hydrogen peroxide, which enters into innumerable industries.

Mr. HADLEY. How many firms are engaged in this industry?

Mr. RENTSCHLER. I think we are one of two firms that manufacture barium dioxide for sale.

Mr. HADLEY. Who is the other one?

Mr. RENTSCHLER. The Rollin Chemical Co., of Charleston, W. Va.

BRIEF OF THE J. H. R. PRODUCTS CO., WILLOUGHBY, OHIO.

DEAR SIR: In accordance with privilege granted us by your committee January 7, we beg to submit the following brief on barium dioxide and barium oxide:

We are manufacturers of barium oxide and barium dioxide. Barium dioxide was mentioned in paragraph 10 of the tariff law of October 13, 1913. The present tariff on barium dioxide is 1½ cents per pound. We ask for an advance of from 8 to 10 cents per pound depending upon the tariff you assess upon barium carbonate. We suggest that barium oxide be introduced into the tariff law and assessed at the same rate as barium dioxide, otherwise there is nothing to prevent importers from entering barium oxide free and converting it into barium dioxide, which is a very inexpensive operation. Our reasons for the above recommendations are:

1. Unfavorable rate on foreign exchange.
2. Impossibility of competing with foreign producers due to the extremely low labor costs in Europe.
3. Low power costs, the Germans using water power at Seisel, in Westphalia, amounting to one-fourth phennig per kilowatt hour.
4. Foreign government regulations favoring small special chemical industries.
5. Low cost of carbonic acid gas abroad due to unlimited natural deposits.

The manufacture of barium dioxide is not a very large industry, but it is a key to hundreds of other industries. Barium dioxide is absolutely essential in the manufacture of either medicinal or commercial hydrogen peroxide. Commercial hydrogen peroxide is essential in the bleaching of wool, hair, feathers, silk, gelatin, ivory, bone, wood, celluloid, etc., and industries using these materials are dependent upon a satisfactory supply of hydrogen peroxide.

Barium dioxide was found absolutely necessary during the war in the manufacture of tracer shells. Large quantities of barium dioxide were furnished by us to Frankford Arsenal, Philadelphia, for this purpose. We also supplied the Navy with considerable amounts of this material which they used very satisfactorily as a substitute for potasium permanganate in disinfection work.

Prior to the war Germany controlled the barium dioxide market of the world because their process for producing this material from barium carbonate was the most economical of any known. After many years of experimental work and expenses covering thousands, the J. H. R. Products Co. has succeeded in perfecting a process for

producing barium dioxide from barium carbonate which we feel confident is as economical as any German process ever developed. We, therefore, feel that your committee should recommend ways and means whereby we may be placed in a position of equality as far as material and labor costs are concerned with European producers. This is all that we ask and we feel confident that we can meet any foreign competition if you will place us on this equality basis.

We attach certified copies of quotations received from European producers, the original copies being on file at this office. According to Tariff Information Series No. 18, the total cost of production per pound of barium dioxide is 19.7 cents. The following quotations from abroad indicate the unusually low cost of production abroad and the impossibility of our meeting such prices at this time:

10 cents per pound, BaO_2, 80 per cent, Maatschappij Voor Chemische & Metallurgische Producten, Amsterdam. Price includes packages, c. i. f. New York. L/1/7/21. G. C. Co.

10.64 cents per pound, BaO_2, 83 to 85 per cent, Buisson & Chanu, Rouen, France; 390 francs per 100 kilos. L/11/3/20.

7.97 cents per pound, BaO_2, 76 per cent, Aug Kjaersgaard. Price includes packages.

11.02 cents per pound, BaO_2, 82 to 85 per cent, Copenhagen. F. o. b. Lübeck or Stettin. C. i. f. Rotterdam or Hamburg.

8.18 cents per pound, BaO_2, 80 to 84 per cent, Copenhagen F. o. b. German port. L/9/14/20.

(Certified copies of above quotations attached hereto.)

M. J. RENTSCHLER, *General Manager.*

THE GRASSELLI CHEMICAL CO.,
Cleveland, Ohio, January 7, 1921.

DEAR SIR: We quote below communication received from our New York office. This is passed along to you as a matter of information.

"Subject: Maatschappij Voor Chemische & Mettallurgische Producten.

"We are in receipt of a letter from this concern again offering us barium carbonate in 10-ton lots at $2.75 per 100 pounds, bags included, c. i. f. New York, bankers credit to be opened in Holland, payable against documents. They are also offering us peroxide of barium, 80 per cent, in 10-ton lots at 10 cents per pound, pdgs included, same terms as above. Kindly pass this information along to The J. H. R. Products Co. for their attention."

E. H. HEIL.

I hereby certify this is a true and correct copy.

W. N. JEAVONS,
The J. H. R. Products Co

[Buisson & Chanu, 19 Route de Duclair, Deville-les-Rouen, France, 3d Novembre 1920.]

(Literal.)	(Translation.)
MESSIEURS: Nous vous informons que nous pouvons vous fournier, sauf vente:	GENTLEMEN: We wish to inform you that we can furnish you, subject to prior sale:
Bioxyde de baryum, 83/85 per cent au prix de 390, depart Rouen. Loge en cylindre fer perdus.	Barium binoxide, 83/85 per cent, at a price of 390 frans, f. o. b. Rouen. Packed in steel drums.
Paiement par accreditif.-faut a vos ordres.	Payment on presentation of documents.
Recevez, Messieurs nos sincers salutations.	Accept, gentlemen, our best wishes.
M. E. LANCELLE.	

I hereby certify this is a true and correct copy.

W. N. JEAVONS,
The J. H. R. Products Co.

[Aug. Kjaersgaard, Copenhagen, Sept. 14, 1920.]

DEAR SIRS: I am in receipt of your letter of May 25, and should like to know if you have now received the therein-mentioned sample of barium carbonate and to hear your opinion about the quality in proportion to the price.

I have been in connection with firms who manufacture barium dioxide, but these have at the present time nothing to offer. For the time being I am able to quote you without engagement:

Bariumsuperoxide not to be supplied below 76 per cent at the price of mark 1121 per 100 kilos, packing in iron barrels included, f. o. b. Lubeck or Stettin. Basis, 80 per cent BaO_2.

Bariumsuperoxide, 82/85 per cent, at the price of mark 1550 per 100 kilos, packing in iron barrels included, c. i. f. Rotterdam or Hamburg.

Barythydrat techn. cryst., at the price of mark 403 per 100 kilos, packing in iron barrels included, c. i. f. Rotterdam or Hamburg.

Bariumbioxide, 80/84 per cent, at the price of mark 1150 per 100 kilos, packing in iron barrels included, f. o. b. German port.

AUG. KJAERSGAARD.
S. JORGENSEN.

I hereby certify this is a true and correct copy.

W. N. JEAVONS.

THE J. H. R. PRODUCTS CO.,
Willoughby, Ohio, January 15, 1920.

DEAR SIR: In reference to and supplementing our brief on the subject of bariumdioxide and bariumoxide for the recent tariff hearings, we are attaching hereto a card which explains itself in the matter of the eagerness of foreign producers to sell their products on this side of the water. The above-mentioned brief was dated January 10, 1921.

Copy of attached card is as follows:

"Messrs. The J. H. R. PRODUCTS Co.,
"*Willoughby.*

"DEAR SIRS: Referring to our last offer of peroxide of barium, we must say to our regret that we have remained without your order. Being desirous to enter into business relations with your worthy firm, we are prepared to consider a reasonable counter offer, and shall be glad if you will make us one. Meanwhile we remain, dear sirs,

"Yours, truly,

"MAATSCHIJ VOOR CHEMISCHE & METALLURGISCHE PRODUCTEN.

"AMSTERDAM, *December 28, 1920.*"

We trust that this will clearly indicate the urgency of our case.

W. N. JEAVONS.

CALOMEL, CORROSIVE SUBLIMATE, AND OTHER MERCURIALS.

[Paragraph 14.]

BRIEF OF MCKESSON & ROBBINS (INC.), NEW YORK CITY.

The present duty of 15 per cent ad valorem under paragraph 14 of the tariff act of 1913 is not sufficient to equalize the difference between the cost of production abroad and in the United States, particularly in view of the present rate of exchange in Italy, Germany, and England.

The factories abroad for the production of these products are located close to the source of production of quicksilver, whereas in this country quicksilver is produced very largely in California, Arizona, and New Mexico, while the factories which produce calomel, corrosive sublimate, and other mercurials are situated many thousands of miles to the eastward, most of them being located on the Atlantic coast.

We therefore respectfully submit that the protection afforded the industry under the present act should be increased; and we would recommend that the duty on these products be increased from 15 per cent ad valorem to 33⅓ per cent ad valorem.

Should the Government assess duty on the crude material from which these mercurials are manufactured, an additional increase on the finished product, at least equal to that on the crude, should prevail.

MEDICINAL COMPOUNDS CONTAINING ALCOHOL.

[Paragraph 16.]

BRIEF OF MCKESSON & ROBBINS (INC.), NEW YORK CITY.

Since the enactment of the tariff act of 1913, the internal revenue tax on non-beverage alcohol has been increased 100 per cent, and we would, therefore, respectfully recommend that a corresponding increase be made in the rates imposed in paragraph 16, so as to make these rates of duty as follows:

If containing 20 per cent of alcohol, or less 20 cents per pound and 40 per cent ad valorem.

Containing more than 20 per cent and not more than 50 per cent of alcohol, 40 cents per pound and 40 per cent ad valorem.

Containing more than 50 per cent of alcohol, 80 cents per pound and 40 per cent ad valorem.

In this connection we quote from the Summary of Tariff Information, 1920, page 35:

"The compensatory rates of duty imposed in this paragraph because of the alcohol content are not proportionate to the increased taxes levied on distilled spirits by the war-revenue acts."

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

MEDICINAL COMPOUNDS AND PREPARATIONS.

The present rates assessed on medicinal preparations should be maintained as they are. Under this title are imported mostly specialties of foreign manufacture not produced here, and that therefore do not enter into competition with any domestic product. They are in no sense luxuries, and their importation should be encouraged in the interest of public health.

Owing to the lesser availability of the raw materials necessary to the manufacture of many of them, which have to be imported from abroad for a greater number of finished articles than in the case of American manufacturers, enjoying the advantage of an ampler domestic supply of them and because of the higher cost of machinery and coal or fuel, and of the increased freights, American manufacturers have already natural protective factors, which offset to a great extent the difference in the cost of labor, between this and the countries supplying them. The loss through breakage averages between 10 and 15 per cent, thus adding a considerable burden to the present cost of the imported articles and affording a further protection. It should be noted moreover, that, in the case of the serums and opotherapic products, American manufacturers have another protection in the restrictions imposed by the Public Health Service on their importation, which is permitted only upon license, that requires the fulfillment of certain specific conditions in their manufacture.

During the war this trade was practically suspended due to Government restrictions. From a total of $2,145,642 a decade ago (fiscal year 1911) it dwindled to merely $519,338 in 1918. It is just now beginning to resume, but it will take some time before it will reach normal. At its height, however, it never attained great importance as shown by the figures above stated. This chamber therefore recommends that the present rates on medicinal compounds and preparations remain unchanged.

ICHTHYOL.

[Paragraphs 17 and 561.]

DURANT ROSE, REPRESENTING THE MEADOWS OIL & CHEMICAL CORPORATION, NEW YORK CITY.

Mr. ROSE. Mr. Chairman, I am representing the Meadows Oil & Chemical Corporation of New York City. This testimony is in behalf of an infant industry established during the war for the purpose of manufacturing in this country ichthyol, an important drug that for many years was a German monopoly.

This drug, which is also known by the chemical term "ammonium ichthyolate," is used by practically every doctor, druggist, and hospital in the civilized world.

There is now a tariff of 20 per cent on ichthyolic preparations under paragraph 17, the base product itself being admitted free under paragraph 561.

The present importation into the United States is over 100,000 pounds a year, a large proportion of which is used in the preparation of such articles as salves, ointments, and suppositories.

During the war it was almost impossible to obtain the genuine product, the price of which rose to $60 a pound for the limited supply that was available, and imported substitutes were selling for $4 to $5 a pound.

It was then that an American chemist discovered a process for making ichthyol from a deposit in Texas. That deposit is a fossiliferous rock, and from that rock is manufactured ichthyol.

The new American product is equal in every way and in many ways superior to the German product.

Based on the present rate of consumption the deposit is sufficient to supply the needs of this country for the next 600 years.

The estimated cost to manufacture was low enough to allow the finished product to be sold for less than the price of even the imported substitutes.

It was, therefore, reasonable to assume that it would be commercially practicable to establish this new American industry which would make the United States independent of foreign products and provide the trade with a higher grade drug at a lower cost.

Several prominent men bought control of the Texas deposit, built a plant at the mine, bought a factory site, put up several buildings, including a modern laboratory, and opened a sales office in New York. This, of course, involved the expenditure of a great amount of time, as well as labor and money, and although the project was conceived and started during the war, it was not until the summer of 1920 that it was possible to produce on a commercial scale. In the meantime the price of imported ammonium ichthyolate declined, until now a large portion of it is selling in this country at from 60 to 70 cents a pound. This is probably due to an abnormally low cost of foreign labor, an abnormally depreciated rate of exchange, or "dumping," or possibly a combination of all three.

Now, these conditions may last for several years, and particularly if Germany resorts to some sort of a system of "dumping," and it is impossible for the American product now to compete on the basis of 60 cents a pound.

The War Trade Board, at the request of this company, has now prohibited importation of ichthyolic products of German or Austrian origin into this country, but that is only temporary and does not affect nor exclude any other products, such as the Swiss or Japanese.

The very existence of this new American industry depends upon adequate protection and we feel that this protection will require a tariff of at least $2 a pound on ammonium ichthyolate or any product containing ammonium ichthyolate.

The average price of imported ammonium ichthyolate is to-day only half of that charged before the war, in spite of the fact that

manufacturing costs are twice as much as they were before the war. Our cost to-day is $2.58 per pound, which is nearly $2 per pound more than the present selling price of a large proportion of the imported products. Therefore we feel that a tariff of $2 per pound is the very least that would be required to place the American ammonium ichthyolate on a competitive basis with the foreign products.

The preparations in which ammonium ichthyolate is used such as ointments, salves, etc., sell for about $4 a pound, and usually contain less than 10 per cent of this drug. Therefore a $2 a pound tariff should not increase the cost of the finished product to the ultimate consumer more than 5 or 6 per cent.

The foreign sources of supply are chiefly Germany, Austria, Swiss, and Japanese.

One foreign source of supply which is not affected by depreciated exchange, and yet against which we can not compete, is the Japanese. During the fiscal year ending in June, 1920, 18 per cent of the ammonium ichthyolate imported into this country came from Japan.

The handicap of this competition is permanent and is due to the extremely low cost of Japanese labor.

Mr. Chairman, I have a letter from Hon. Mark W. Potter, of the Interstate Commerce Commission, on this subject, addressed to the chairman of this committee, which, with your permission, I would like to read [reading]:

WASHINGTON, *January 7, 1921.*

DEAR SIR: I have been requested by the Meadows Oil & Chemical Corporation, of 52 Vanderbilt Avenue, New York, to advise you of my information and activity regarding the production of ichthyol in the United States.

Approximately two years ago, while I was in New York and before I became identified in any way with the work of the commission, Mr. Robert P. Tucker, formerly of Charleston, S. C., then of New York, requested me to assist him to arrange the financing for the manufacture and sale of ichthyol in the United States. He informed me that ichthyol was one of the most valuable drugs known to chemists and physicians; that it was in general use throughout practically the entire civilized world; that the only source of production had been in Germany or Austria; that it had sold here at approximately $4 per pound prior to the war, but that as a result of the war importations were cut off and that such as could then be obtained was selling at $60 per pound; that he had obtined control of a deposit of fossiliferous limestone located in Texas which carried the base from which ichthyol could be produced. I caused an investigation to be made with a view to determining the correctness of Mr. Tucker's representations and satisfied myself that he had fairly and correctly presented the situation to me. I sent a representative to Washington to make inquiry at the proper bureaus regarding the value of ichthyol and its production in this country.

The report which I received was to the effect that the Geological Survey was keenly interested in the production of ichthyol in the United States, and was then engaged in an effort to locate in the United States a deposit from which ichthyol could be won. My recollection is that David White, chief geologist, was then engaged in a more or less extensive study of the situation designed to develop in this country the production of ichthyol. I caused an investigation of the Texas deposit to be made by two persons independently. Being satisfied that the representations which had been made to me were substantially true, I, with certain of my friends, arranged for Mr. Tucker the financial assistance he required. Meadows Oil & Chemical Corporation was formed. A proper organization was put together. The deposit in Texas was opened up and apparatus for the distillation of the rock and the recovery of the ichthyol base was installed. Property was purchased at New City, N. Y., upon which was erected a laboratory and a building for the conversion of the base recovered from the Texas rock into the refined ichthyol. Careful and thorough tests over a long period were made of the ichthyol produced, and it was established by therapeutic experience and bacterial test that the product of the Meadows company was equal to the best German product. Recently the company has been in position to

manufacture ichthyol on a large scale. Approximately $50,000 has been expended in investigations, experiments, and equipment referred to.

The importance of the drug ichthyol and the exclusion of the original German product from the markets naturally stimulated effort to produce substitutes. Several substitutes have been produced which I am informed have varying degrees of merit. The principal substitutes, I understand, are produced in Austria and in Japan.

It has developed that large quantities of ichthyol were used by manufacturing chemists in the manufacture of their products. These chemists naturally replaced the genuine German ichthyol, which could not be obtained, with the substitutes which had been put upon the market. It is now reported that the manufacturing chemists referred to are meeting with success in selling their products containing the substitutes rather than the genuine German ichthyol As a result naturally of cheap foreign labor and the exchange situation, the substitutes referred to can, under present world conditions, be marketed in this country at very low prices. They are now being marketed at prices with which the Meadows company can not successfully compete. Unless, and until, normal conditions are restored or a duty protecting the American industry is imposed, it would appear that the production of ichthyol in the United States on a commercial basis is not feasible. The question, therefore, which confronts the Meadows company, the American people, and their Representatives in Congress is quite obvious. It has been established that there can be produced in the United States an ichthyol superior to anything ever produced anywhere in the world, and in quantities sufficient to supply world markets. The preliminary work has been thoroughly and cautiously done. Development work has been done and the manufacturing establishment has been erected and equipped. A competent organization has been put together.

Whether this industry shall be abandoned, whether this country shall be compelled to use inferior products of relatively uncertain merit, whether this country shall remain exposed to the possibility that even these products may be cut off as a result of international disturbance as took place when the war with Germany deprived this country and its forces of ichthyol, which was exclusively enjoyed by Germany and her forces and allies, is a matter which depends solely upon the judgment and decision of the Congress regarding the imposition of a reasonable duty on the foreign products.

MARK W. POTTER.

BRIEF OF THE MEADOWS OIL & CHEMICAL CORPORATION, NEW YORK CITY.

This brief is in behalf of the Meadows Oil & Chemical Corporation, 52 Vanderbilt Avenue, New York, which manufactures ichthyol, an important drug that for many years was a German monopoly.

Ichthyol, which is also known by the chemical term "ammonium ichthyolate," is used by practically every doctor, hospital, and druggist in the civilized world. Although the average prescription in which ichthyol is the active ingredient contains but a fraction of an ounce, the present importation in the United States is over 100,000 pounds a year.

During the war it was almost impossible to obtain the genuine product, the price of which rose to $60 a pound for the limited supply that was available. Imported substitutes sold for $4 to $5 a pound.

It was then that an American chemist discovered a process for making ichthyol from a deposit in Texas.

The new American product was equal in every and superior in many ways to the original ichthyol. Based on the present rate of consumption the deposit is sufficient to supply the needs of this country alone for over 600 years. The estimated cost to manufacture was low enough to allow the finished product to be sold for less than the price of even the inferior substitutes.

It was therefore reasonable to assume that it would be commercially practicable to establish this new American industry which would make the United Sates independent of foreign products and provide the trade with a higher grade drug at a lower cost.

Several prominent men bought control of the Texas deposit, built a plant at the mine, bought a factory site, put up several buildings, including a modern laboratory, and opened a sales office in New York.

This involved the expenditure of a great amount of time, labor, and money, and although the project was conceived and started during the war, it was not until last summer that it was possible to produce on a commercial scale.

In the meantime the price of ammonium ichthyolate steadily dropped, until some of it is now selling in this country for 60 cents a pound.

Sixty cents a pound, we feel confident, does not represent a normal selling price which can be maintained. It is probably due to abnormally low cost of foreign labor, an abnormally depreciated rate of exchange, or "dumping," or possibly a combination of all three.

These conditions may last for several years, particularly if a system of "dumping" is resorted to, and in the mean time it is impossible for the American product to compete, or to sell at a heavy loss until such time as normal conditions will compel the foreign competitors to increase their prices.

The War Trade Board, at the request of this company has, now prohibited the importation of ichthyolic products of German make or origin, but that is only a temporary measure.

The very existence of this new American industry depends upon adequate protection until it has gained a foothold in the American market, which can not be done under present conditions.

This protection we feel would be accomplished best by some form of a license system, but a $2 a pound tariff would probably serve the purpose.

The average price of imported ammonium ichthyolate is only half of that charged before the war. This is in spite of the fact that manufacturing costs have more than doubled.

Although German manufacturing costs in terms of marks are about three times as high as in 1914, an American dollar in Germany is worth 17 times as much as it was before the war. Thus the profit in the exchange alone enables the German exporter, without resorting to "dumping" to sell in this country at one-sixth of the price he would have to charge under normal conditions, which would be about $3 per pound.

Our cost to-day per pound is $2.58, which is $2 a pound more than the present selling price of a large proportion of the imported products.

Therefore we feel that a tariff of $2 per pound is the very least that would be required to place the American ammonium ichthyolate on a competitive basis with the foreign products.

Products in which ammonium ichthyolate is used, sell for about $4 a pound and usually contain less than 10 per cent of this drug. Therefore a $2 a pound tariff should not increase the cost of the finished product to the ultimate consumer more than 5 or 6 per cent.

One foreign source of supply which is not affected by depreciated exchange and yet against which we can not compete is the Japanese. During the fiscal year ending in June, 1920, 18 per cent of the ammonium ichthyolate imported into this country came from Japan.

The handicap of this competition is permanent and it is due entirely to the extremely low cost of Japanese labor.

ICHTHYOL MANUFACTURED IN AMERICA.

[New York Evening Journal.]

You may not know it, but this interests you.

Ichthyol is a drug that attacks with peculiar force the germs of dangerous diseases, for instance, *Bacillus coli* and *Staphylococcus*.

The colon bacillus kills thousands of children every year. It is believed, although not proved, that it travels through the walls of the intestines, affecting the kidneys and causing in children pylitis, a disease that has worried many mothers.

It is therefore good news that an American concern has succeeded in manufacturing this product, of a quality and strength from 200 to 400 per cent greater than that of the ichthyol hitherto imported from abroad. It is important that we should know how to do our own chemical work in this country, from the simple making of aniline dyes to the complex preparation of products necessary in fighting disease.

Those not much interested in disease will be interested in the fact that this ichthyol, with its peculiar power to destroy disease germs, is made from fossil marine animals, creatures that lived under the ocean billions of years ago, and billions of years before such a thing as a human being existed.

It would have surprised those creatures had some one told them, "Millions of years after you are dead and fossilized you will save huge, two-legged human mothers living outside of the water, from worrying about diseases in their children.

"And those huge creatures destined to rule the earth will actually be the descendants of humble forms of life now living here in the ocean beside you."

We are indebted to Mr. Durant Rose for the information about ichthyol. For any further information address him, No. 171 Madison Avenue, New York City.

Mr. Rose is the grandson of Thomas C. Durant, to whom, at least as much as to any other man, is due the construction of the Union Pacific Railway.

ICHTHYOL IS NOW BEING PRODUCED IN AMERICA.

[Medical Times, October, 1920.]

Forty years ago a German chemist was experimenting with a rock formed by the deposit of great quantities of prehistoric marine animals which had lived in the Tyrol Mountains when they were entirely submerged. Through a process of dry distillation the chemist produced an oil which was found to be a remarkable curative agent for various diseases of the skin and blood. A little later the product, known as ichthyol, was produced from the base oil. For 30 years Germany exported her wonderful preparation all over the world. When the war broke out it was practically impossible to procure any of this drug, and the price rose from $5 to $80 per pound. The curtailment of the supply of ichthyol was keenly felt, and there were many attempts to make substitutes. In America a synthetic compound was made from linseed oil and in Japan one out of the soya bean. Now Texas mines come to the forefront and a successful product is the result. The Meadows Oil & Chemical Corporation is operating the Texas mines. The most notable feature of the new product is that after being tried out in the hospitals and in the practice of the physicians it has proved to be superior to the German. Its ability to penetrate the skin, which is one of the most important characteristics of ichthyol, is from two to four times that of the original.

Another important characteristic is its germicidal action, as a 1 per cent solution will kill staphylococcus pyogenes aureus, and yet an 8 per cent solution will allow the growth of *B. coli*.

The finished product is now being made at the company's new laboratories at Durant, Rockland County, N. Y.

REPORT IN THE MATTER OF A TEST TO DETERMINE THE PENETRATING POWER OF ONE SAMPLE OF MEADOWS AMMONIUM ICHTHYOLATE, IN COMPARISON WITH MERCK'S ICHTHYOL, USING STAPHYLOCOCCUS PYOGENES AUREUS AS THE TEST ORGANISM.

[From the Pease Laboratories, (Inc.).]

NEW YORK, *November 5, 1920.*

The sample was marked "Meadows ammonium ichthyolate."

Technique.—Tubes of beef extract agar were melted and when cooled down to the proper temperature, were inoculated with Staphylococcus pyogenes aureus which was thoroughly distributed through the agar. These were allowed to harden. A dilution of 1:50 was prepared of Meadows ammonium ichthyolate and of Merck's. This dilution of each was applied to the surface of the agar in amounts varying from one to four drops. Three tubes for each drop of each respective ichtyhol were tested in this manner. The tubes were incubated 48 hours at 37° C. The following table gives the average depth of penetration in inches.

Material tested.	Dilution.	Average depth of penetration in inches.			
		1 drop.	2 drops.	3 drops.	4 drops.
Meadows ammonium ichthyolate	1:50	⅛	⅛	⅛	⅛
	1:50	[a] ⅛	⅛	⅛	⅛
	1:50	⅛	⅛	⅛	⅛
Average		[b] ⅛	⅛	[a] ⅛	⅛
Merck's ichthyol	1:50	.....	⅛	⅛	[a] ⅛
	1:50	.....	⅛	⅛	[b] ⅛
	1:50	.....	[a] ⅛	⅛	⅛
Average		.....	[b] ⅛	⅛	[a] ⅛

[a] Slightly over. [b] Slightly under.

JOHN H. WRIGHT,
Director Department of Bio-Chemistry, Pease Laboratories (Inc.).

REPORT IN THE MATTER OF A KINYOUN ANTISEPTIC TEST OF A SAMPLE OF ICHTHYOL IN COMPARISON WITH MERCK'S ICHTHYOL, USING STAPHYLOCOCCUS PYOGENES AS THE TEST ORGANISM IN THE PRESENCE OF ORGANIC MATTER.

Sample was marked "Ichthyol R-OL."

Technique.—The dilutions indicated in the table were made up in double the required strength with sterile distilled water, 10 c. c. of each of the dilutions were transferred to small sterile bottles, and an equal amount of double-strength broth was added to these. The bottles were then thoroughly shaken and were inoculated with 0.1 c. c. of a 20-hour culture of staphylococcus pyogenes aureus. The bottles were sealed with paraffin and were incubated at 37° C. for 48 hours. At the end of this time, macroscopical and microscopical examinations were made and transfers were made from the bottles to tubes of beef-extract broth. These tubes were incubated 24 hours at 37° C., recording the growth at the end of that time.

Sample marked.	Dilutions.	Calculations.	Growth after 48 hours.	Microscopic examination.	Broth transfers.
Ichthyol R-OL	1:50	Stock.	Sterile	Sterile	Sterile.
	1:100	10+10	do	do	Do.
	1:250	5+20	Growth	Growth	Growth.
	1:500	5+45	do	do	Do.
Merck's ichthyol	1:50	Stock.	Sterile	Sterile	Sterile.
	1:100	10+10	do	do	Do.
	1:250	5+20	Growth	Growth	Growth.
	1:500	5+45	do	do	Do.

REPORT IN THE MATTER OF A KINYOUN ANTISEPTIC TEST OF ICHTHYOL IN COMPARISON WITH MERCK'S ICHTHYOL BACCILLUS COLI AS THE TEST ORGANISM IN THE PRESENCE OF ORGANIC MATTER.

Sample was marked: "Ichthyol R-OL."

Technique.—The dilutions indicated in the table were made up in double the required strength with sterile distilled water. Ten c. c. of each of the dilutions were transferred to small sterile bottles and an equal amount of double strength broth was added to these. The bottles were then thoroughly shaken and were inoculated with 0.1 c. c. of a 24-hour filtered culture of bacillus coli. The bottles were then sealed with paraffin and were incubated at 37° C. for 48 hours. At the end of this time, macroscopical and microscopical examinations were made and transfers were made from the bottles to tubes of beef extract broth. These tubes were incubated 24 hours at 37° C., recording the growth at the end of that time.

Sample marked.	Dilution.	Growth after 48 hours.	Microscopical examination.	Broth transfers.
Ichthyol R-OL	1:5	Sterile	Sterile	Sterile.
	1:10	do	do	Do.
	1:15	Growth	Growth	Growth.
	1:25	do	do	Do.
	1:50	do	do	Do.
Merck's Ichthyol	1:5	Sterile	Sterile	Sterile.
	1:10	do	do	Do.
	1:15	Growth	Growth	Growth.
	1:25	do	do	Do.
	1:50	do	do	Do.

NEW YORK, *June 29, 1920.*

DEAR SIR: After using ichthyol (Meadows) for a period of two months myself in the surgical dispensaries of R——— and G——— Hospitals, in the gynecological dispensary of R——— Hospital, as well as in the practice of eight associates in medicine and my own practice; I make the following report:

Ichthyol (Meadows) from the physical standpoint is superior to the German ichthyol in the following essential points:

1. It has less odor.
2. It shows less sediment after prolonged standing.
3. It is smoother in consistency.
4. It mixes with various vehicles such as glycerine, lanolin, and vaseline, forming a smoother preparation than the German. Therapeutically speaking, in no case has

its results been inferior to the German, it always having been equal or superior. It is rather interesting to note that seldom do patients complain of the odor as they do in the case of the German product.

Individually speaking for each place in which the ichthyol has been tried I can state the following:

1. R——— Hospital.

(*a*) Surgical clinic—Ichthyol (Meadows) has been used daily except Sundays in the form of a 10 per cent ointment in vaseline for the treatment of contusions, sprains, strains, and early infections. It has given satisfaction in every case and in this capacity has been used approximately one hundred times. As compared with the German product it was often noted that there was less of the unguentum on the gauze at the next dressing two days later, which would tend to argue for increased penetration of the Meadows product.

(*b*) Gynecological clinic (disease of the female genitourinary organs): Here Meadows ichthyol has been used extensively for eight weeks. It has been applied by vaginal tampons in 25 per cent, by volume, in glycerine. Ichthyol tampons have been used in the routine treatment of pelvic exudates, gonorrheal salpingitis, endocervicitis, and retroversions of the uterus with considerable discharge. The Meadows ichthyol has been used daily except Sundays in this clinic and three times weekly under the personal observation of the writer. It has given satisfaction in each case and has been used approximately on 125 occasions on 40 to 50 different patients.

2. ——— Hospital, ——— surgical clinic: Meadows ichthyol in the form of a 10 per cent ointment in vaseline has been used for six weeks. During this time the writer was in charge of fractures, with a large number of contusions under treatment. Ichthyol was used approximately 50 times and always with satisfactory results.

3. In private practice: I have used ichthyol on several cases of contusions, on a case of congestion of the breast in a woman and in the form of a suppository. The Meadows product has given relief just as satisfactory, if not more, than the German.

4. Private practice of associates:

Dr. ———, of New York, reports: Very successful results with Meadows ichthyol, and was especially pleased with the results in a case of gonorrheal urethritis which cleared after six to eight injections when argyrol had failed to give satisfactory results. Six other doctors report satisfactory results from Meadows ichthyol.

Dr. ———, of the department of diseases of the skin of ——— Hospital, states he has had excellent results from the use of 50 per cent Meadows ichthyol in lanolin. In several cases the patients asked where they could purchase the drug when the ounce was exhausted.

Dr. ——— reports excellent results, especially in the treatment of erysipelas.

——— ———, M. D.

[Medical Times, October, 1920.]

Another important characteristic is its germicidal action, as a 1 per cent solution will kill staphylococcus pyogenes and yet an 8 per cent solution will allow the growth of B. coli.

[Drugs Topics, September, 1920.]

Texas marine deposit yield ichthyol of double potency of German products.

[Chemical and Metallurgical Engineering, Aug. 4, 1920.]

Its penetration, particularly in high dilution, is from 200 to 400 per cent greater (than the German) and its therapeutic value has been found to be far superior.

[Editorials in New York Evening Journal, Sept. 20; Chicago Evening American, Sept. 25; Washington (D. C.) Times, Oct. 7; Wisconsin News.]

It is therefore good news that an American concern has succeeded in manufacturing this product of a quality and strength from 200 to 400 per cent greater than the ichthyol hitherto imported from abroad.

[Los Angeles Evening Herald editorial, Sept. 28.]

Here's something we manufacture best in America.

[New Britain (Conn.) Herald, Sept. 10.]

The most notable feature of the new product is that after being tried out in the hospitals and in the practice of physicians it has proved to be far superior to the original.

[Nyack (N. Y.) Evening Journal, Sept. 20.]

The Meadows Oil & Chemical Corporation is now producing in commercial quantities a new American ichthyolate which is superior to the German.

BRIEF OF THOMAS O. MARVIN, SECRETARY HOME MARKET CLUB, BOSTON, MASS.

AMERICAN VALUATION AS APPLIED TO DYESTUFFS BILL.

The Home Market Club stands for the protection of American industries. Alexander Hamilton, the founder of the American system of protection, showed that protection can be secured in one of several ways, but that the levying of protective tariff duties was to be preferred. One of the methods which he mentioned, in case complete protection was required, was the prohibition of imports.

Friends of the American chemical industry, which has had remarkable expansion during the war and which was one of the preeminent means by which we helped to win the war, believe that tariff duties will not be sufficient to save the industry from ruinous postwar competition and suggest the adoption of a license system, which a is modification of the prohibition of imports.

We wish to suggest that the possibilities of the tariff system of protection have not been thoroughly utilized in the consideration of this question. We would recall to your attention the fact that the first American tariff law, passed July 4, 1789, provided that the ad valorem duties on imports should be levied on the "value thereof at the time and place of importation." This law established American valuation for the basis of levying duties. A return to this method would be of material aid in securing for dyestuffs protection along tariff lines. The American valuation being higher than foreign valuation, the same ad valorem rate would produce the same effect as a higher duty. For instance, as an illustration of the application of American valuation to the dyestuffs bill, take a foreign dye valued at 20 cents per pound, the cost of which in this country would be, for instance, 52 cents. Applying the rates of the Longworth bill, Group III, to this importation, the result would be as follows:

Foreign cost, 20 cents, +specific duty, 7 cents +ad valorem, 45 per cent (9 cents) =duty paid, 36 cents.

The advantage of levying the ad valorem duty on the American value, which in this case is estimated at 52 cents, is shown in the following:

Foreign cost, 20 cents, +specific duty, 7 cents, +ad valorem, 45 per cent (23 cents) =duty paid, 50 cents.

Figuring the ad valorem duty on the American value adds 23 cents to the cost of the foreign dye, in this particular case, against 9 cents under the present method of levying the ad valorem rate upon the foreign value.

The example above given of the application of the ad valorem rate to the American value falls short by 2 cents of yielding sufficient protection for the American product costing 52 cents, but protection could be secured in this case by a specific duty of 10 cents instead of 7 cents, which would make the duty-paid cost of the imported article 53 cents against our manufacturing cost of 52 cents.

This illustration shows that by the adoption of American valuation and the proper adjustment of specific and ad valorem rates of duty protection can be secured for dyestuffs by protective tariff methods.

LETTER FROM FELIX FEZANDIE, NEW YORK CITY.

Washington, D. C., January 6, 1921.

DEAR SIRS: I beg to submit the following suggestions with regard to Schedule A, with particular reference to dyestuffs. I desire to emphatically register opposition to any license system in peace times, and if any license system is adopted, it should be applied to all alike. If the welfare of the country requires the exclusion of imported dyes, everybody without exception should be prevented from importing such dyes. If the welfare of the country does not require this, then every dealer without any exception should be allowed to import whatever he wants.

Distinction between consumers and importers.—To my mind this has no place whatever in a tariff measure. Everyone should be put upon absolutely equal basis. To force the importer to give away the name of the manufacturer in Europe from whom he purchases, and to force the importer to give away the name of the consumer in the

United States, the price of goods bought, and the quantity of goods bought, and to forbid selling in the open market without special dispensation, is to well nigh destroy the importers' business completely. If it is the object of the present tariff to destroy all competition with domestic manufacturers, then it should be applied equally to every class in this country.

High tariff.—Then too, if it is the object of the tariff to put it so high as to destroy competition, a stop should not be made at dyes, but the tariff should be put on all other articles as well.

Fair tariff.—The fair way to do would be to place the duties sufficiently high to give the manufacturers here a fair margin of profit on normal values. Whatever benefit is made on the present inflated values ought to be offset in great measure by the profits made during war times.

COAL-TAR PRODUCTS.

[Paragraphs 21 and 23.]

A. C. ROBERTSON, REPRESENTING RHODIA CHEMICAL CO., NEW YORK CITY.

Mr. ROBERTSON. The two products in which we are chiefly interested, we have filed a brief with you concerning them; these two products are hydroquinone and monomethyl-paramidophenol sulphate, otherwise known as metol and rhodol sulphate and a number of other names. It is a coal-tar product.

These two preparations are chiefly and almost entirely photographic products. Prior to the war there was no manufacture of metol in this country. The importation was from Germany, from two different sources; the one being Hoefter people and the other being Agatha people. At that time their prices ranged from $1 to $5 per pound. During the war eight different concerns went into the manufacture in this country. We started in February, 1919, and our plant started to produce in October, 1919. During the war the prices went up as high as $30 to $40 a pound. We are the only ones, I think, that are left in the manufacture in this country.

Our chief difficulty is the importation of the article from France, for the simple reason that it is prohibited by the War Trade Board from coming in from Germany. It has been coming in duty-paid at $3 a pound. The rate in France is 85 francs a kilo, and considering the present exchange of 6 cents per franc, this is equal to $2.27 per pound, and they are able to sell it for considerably less than $4 a pound. Our lowest cost of production has been $4.25 per pound, and that is within the last 60 days. We have, in fact, sold it higher than $5.60, and we supply one of the largest photographic industries in this country. That is, we did that last year; what we can do this year I do not know. It is most essential that there be some protection to this industry.

In addition to the brief we have filed, I wanted to offer the suggestion that the War Trade Board be given control of the importation of that and some other articles, as well from friendly countries as from Germany. Unquestionably there is a lot of the same article being shipped from Germany into Switzerland, and France, and other countries, and then shipped in here.

Mr. GARNER. Do you understand that the testimony now being taken is for the purpose of making up a tariff bill in midsummer?

Mr. ROBERTSON. Yes; but I was looking for some temporary relief in this matter, between now and this summer. Our plant has

already lost of great deal of money. We are not one of those who got the chocolate cake that was passed around during the war and those who got the profits and then were forced out because they could not produce it less than $10 a pound. We have our manufacturing costs down to $4.25.

Mr. GARNER. You hope to sustain yourselves for six or eight months more and then quit?

Mr. ROBERTSON. No; we want to continue, but we want some little protection in the interim until we get something permanent. I think when our position is thoroughly understood and that the article will be manufactured here, we will be enabled to build up the industry and live here.

Our lowest wage is about 50 cents per hour, and in France it is from 12 to 15 francs per day.

Mr. GARNER. What is the opinion of the business men of the country as to the present wage scale, based on present conditions?

Mr. ROBERTSON. Lower, but never a prewar condition, I do not believe.

Mr. GARNER. That makes it quite difficult at this time to ascertain the difference in the cost of production here and abroad and I take it from your statement that you would be willing to undertake the continuance of your business if you had a tariff of the difference between the cost of production here and abroad?

Mr. ROBERTSON. Yes; all we ask is to keep us on an equal basis.

Mr. GARNER. What do you mean by an equal basis?

Mr. ROBERTSON. Well, if money is worth 10 per cent here and only 3 per cent there——

Mr. GARNER (interposing). Everything being normal, then, would the difference between the cost of labor in this country and the cost of labor abroad be all that you would ask for the protection of your industry?

Mr. ROBERTSON. Based on the present costs?

Mr. GARNER. I say, normal.

Mr. ROBERTSON. Not where they were allowed to dump their goods here——

Mr. GARNER (interposing). Then if it was normal, you would not be willing to accept a tariff, or undertake to conduct your business in this country with a tariff of the difference between the labor cost here and the labor cost abroad?

Mr. ROBERTSON. With the cost of production there and here, we would have no objection, the cost being the same as ours.

Mr. GARNER. In other words, if they borrowed money at 3 per cent and you paid 10, you would want the customhouse to protect your interests there also?

Mr. ROBERTSON. Yes, sir.

The CHAIRMAN. And that is a part of your costs?

Mr. ROBERTSON. Yes, sir.

The CHAIRMAN. In other words, at a given time, Mr. Robertson, you would be satisfied if Congress would place a duty on the imported articles that come into competition with your product?

Mr. ROBERTSON. Yes, sir.

The CHAIRMAN. To bring it up to your cost?

Mr. ROBERTSON. Yes, sir.

The CHAIRMAN. And you would take your chance in holding your business?

Mr. ROBERTSON. We would take our chances in holding our business. We have shown that our product is the equal if not better than anything that is produced in Germany or France.

PYROXYLIN PLASTIC COMPOUNDS.

[Paragraph 25.]

NATHAN M. CLARK, VICE PRESIDENT THE CELLULOID CO., REPRESENTING THE PYROXYLIN MANUFACTURERS' ASSOCIATION.

The American manufacturers of pyroxylin plastic compounds understanding that there is to be an effort made toward a general revision of the tariff and realizing the great necessity for such action in their own industry, beg leave to direct your particular attention to paragraph 25, schedule A, of the act of October 3, 1913.

At the hearings of this same committee held prior to the adoption of that act, we appeared here and earnestly begged that such protection as had been granted to us in the Payne-Aldrich tariff of August, 1909, be continued and that no reduction be made. We pointed out that while our industry was purely an American one so far as invention and development were concerned, that our patents and chemical technique had been appropriated and that there had grown up in Europe and Japan a serious competition that was threatening our very existence. In spite of all our arguments based upon facts, our appeal was not heard and a radical reduction in the rates of duty on our commodity was made. Under the Payne-Aldrich tariff the rates of duty were as follows: Collodion, etc., 40 cents per pound. In blocks, sheets, rods, tubes, or other forms not polished wholly or partly, 45 cents per pound. Polished, wholly or partly, or in finished or partly finished articles, 65 cents per pound, and 30 per cent ad valorem.

Under the Underwood-Simmons tariff the rates of duty were as follows: "Collodion, etc., 15 per centum ad valorem. In blocks, sheets, rods, tubes, or other forms not polished wholly or partly 25 per centum ad valorem. Polished, wholly or partly, or in finished or partly finished articles, 40 per centum ad valorem."

Immediately upon the passage of that act, the effect of this reduction was apparent. The American market was flooded with foreign material at prices with which we could not compete and our industry confidently expected to be wiped out.

We were saved by the World War, for it at once shut out Germany, France, England, and Japan more effectively than any tariff we might hope to ask for.

The war is over, but it has left us burdened with heavy taxation. We are paying the highest wages ever known in the history of this country. Our raw materials are more than 150 per cent higher than prewar, and the condition of foreign exchange is the most threatening menace to our manufacturers they have ever before faced.

Our European competition is very serious. The competition from Japan threatens to annihilate us. Europe and America are

in a similar position as regards camphor, which enters largely into our commodity, but Japan rules the world as to this item. We are at her mercy when we buy camphor. She tells us how little or how much we may have, the price we must pay, and has systematically reduced our supply.

Naturally her control of this item has given her intimate knowledge of its use. Some years before the war the Japanese evidently coveted the pyroxylin plastic business, of which they had learned from their camphor distribution, and numerous factories were there instituted to make a home market for their camphor and at the same time control the pyroxylin industry. This effort was successful, and made great progress up to 1914–15, when all but one of these factories were diverted to war purposes. Since the armistice there has been a general amalgamation of Japan industries and the pyroxylin manufacturers have recently been consolidated into a governmentally fostered trust, which is now spreading out its tentacles to monopolize the pyroxylin plastic business of the world. To-day the American market is flooded with circular letters and samples of materials offering Japanese material under the trademark of the Celluloid Co.

With the highest Japanese daily wage in any industry of 45 cents as compared with the American average of $5.25 in this industry, and Japan in complete control of the camphor supply, it does not take much imagination to see the great disadvantage of the American manufacturer.

It is evident from the statistics that the American pyroxylin plastic industry exports but a normally small proportion of its production. Its market must be essentially American, and should be preserved. We therefore call attention to paragraph 25, Schedule A, and respectfully request [reading]:

1. *Items and paragraphs in which interested.*—That the duty on collodion and all other liquid solutions of pyroxylin, or of other cellulose esters, or of cellulose, be restored to 40 cents per pound, as in the Payne-Aldrich tariff.

That the duty on "compounds of pyroxylin, or other cellulose esters, or of cellulose, whether known as celluloid or by any other name, if in blocks, sheets, rods, tubes, or any form whatsoever, unfinished, partially or wholly, as to surface, and not made into finished or partly finished articles," be fixed at 60 cents per pound.

Under the Payne-Aldrich tariff the specific duty under this classification was 45 cents per pound. Our request for this 5 cents increase is to protect us against the great disparity between wages paid in this and foreign countries and the increased cost of raw materials.

That the duty on these materials "if partially or wholly polished or finished as to surface, or if unfinished or partially finished articles or articles in which any compound of pyroxylin or other cellulose esters or cellulose is the component material of chief value, except photographic films, whether or not such articles are more specifically or generally described or provided for under some other classification by name or otherwise," be fixed at 60 cents per pound and 40 per cent ad valorem.

The specific duty here asked for is 5 cents per pound less than that allowed in the Payne-Aldrich tariff, while the ad valorem duty is 10 per cent higher, for the reason that a large proportion of articles imported under this classification are light in weight and with the cheap foreign labor by which they are made, the chief protection is in the ad valorem duty and not the specific. We are, therefore, willing to sacrifice a portion of the specific duty on heavier articles to obtain this increased ad valorem on the lighter.

2. *Importance of the industry.*—The importance of this industry is apparent from the fact that $34,000,000 are employed in the plants of the four principal manufacturers, and it is estimated that $75,000,000 is a fair value to place upon the capital invested in the industry in this country.

This has been wholly developed since the invention of this material by an American 50 years ago, and ground has hardly been scratched in the useful application of this wonderful substance.

It is impossible to accurately arrive at the total number of persons employed, but we think it a conservative estimate to place the number at 75,000.

The industry is closely allied to many important industries of the country, in that it is a large consumer of cotton, acids, alcohol, camphor, dyes, pigments, and various other chemicals.

3. *Costs, wages, and competition.*—During the period of the war this industry, like others, has been subjected to such violent and spasmodic changes in the price of labor and material that the statistics of no considerable period are available to intelligently reflect the actual cost conditions. Neither can we furnish any data as to present European conditions that would serve any practical purpose, inasmuch as those factories have only recently resumed operations.

As to the Japanese labor conditions, it appears from the Nineteenth Financial and Economic Annual of Japan, issued by the Japanese department of finance, that the highest average daily wage paid to males above the age of 15 years in any industry enumerated is 90 sen, or 45 cents American coin on a parity of 50 cents per yen. We do know that American labor is from 5 to 13 times higher than in Germany and Japan, the countries from which we suffer the severest competition.

4. *Sources of import.*—The principal sources of imports are Germany, France, England, and Japan. The volume of such imports is not reflected in the statistics of imports and duties for the reason that a large proportion of such imports are entered under other paragraphs than those applying to this material. For example: Toys, formerly a German industry and because of the war becoming an American industry, with a number of factories employing several thousand people, has since the armistice practically become Japanese, and this market has been flooded with all kinds of Japanese dolls, and toys made from pyroxylin material, as can be observed in the stocks of any of the stores. The American factories have been unable to meet the competition, and for some months have been practically closed.

These toys, made wholly of pyroxylin plastic, are imported under paragraph 342 (toys) at 35 per cent ad valorem.

The foreign manufacturers have absorbed the foreign markets, and this industry depends absolutely upon the American market for its existence.

5. *Changes in phraseology.*—To make more clear the intent of paragraph 25, and to prevent as far as possible the importation of pyroxylin plastics under some other paragraph, we suggest the following phraseology, which upon comparison will be found to contain but slight changes from the present form.

* * * Collodion and all other liquid solutions of pyroxylin, or of other cellulose esters, or of cellulose, 40 cents per pound; compounds of pyroxylin, or of other cellulose esters, or of cellulose, whether known as "celluloid" or by any other name, if in blocks, sheets, rods, tubes, or any form whatsoever, unfinished, partially or wholly as to surface, and not made into finished or partially finished articles, 50 cents per pound; if partially or wholly polished or finished as to surface, or if in finished or partially finished articles or articles in which any compound of pyroxylin or other cellulose esters or cellulose is the component material of chief value, except photographic films, whether or not such articles are more specifically or generally described or provided for under some other classification by name or otherwise, 60 cents per pound and 40 per cent ad valorem.

6. *Suggestions as to administrative features.*—Few if any serious difficulties in our industry have arisen under the operation of the administrative features of the present law, but we desire to recommend a change in the present method of levying the ad valorem duties. In Article III, paragraph K, of the administrative features of the present law it is provided that collectors of customs and appraisers shall ascertain "the actual market value and wholesale price of the merchandise at the time of exportation to the United States, in the principal markets of the country whence the same has been imported."

We recommend that this be amended to read that collectors of customs and appraisers "shall ascertain the actual market value and wholesale price of the merchandise of the same or similar character at the time of importation in the principal markets of the United States, and levy the ad valorem rates of duty on the value in the markets of the United States."

This change from foreign value to American value as a basis for levying ad valorem duties will place the imports from all countries on an equal valuation. It will reduce to a minimum the undervaluation of imports and increase the revenue from customs duties. It will place all foreign producers on a fair and equal basis and afford to American producers an opportunity to place their goods on the American market on terms of equality with the products of foreign countries.

Mr. GREEN. Is there any synthetic camphor on the market?

Mr. CLARK. None that is American made.

Mr. GREEN. Do you use any?

Mr. CLARK. We have tried to, sir, but it does not exchange with natural camphor.

Mr. FREAR. You are vice president of the Celluloid Co.?

Mr. CLARK. Yes, sir.

Mr. FREAR. I notice you say on page 3 that the Japanese are selling materials on the American market under the trade-mark of the Celluloid Co.

Mr. CLARK. Yes, sir.

Mr. FREAR. What protection have you against that?

Mr. CLARK. We are in doubt about that. We are now searching out what rights we have and how we may retaliate.

Mr. FREAR. Do you know whether that practice has been in vogue with the Japanese heretofore?

Mr. CLARK. I know in my previous association with the Worthington Pump & Machinery Co. that at Kobe, Japan, they had copied all of our line and were marketing it throughout the Orient as "Worthington."

Mr. FREAR. That takes away your trade-mark protection?

Mr. CLARK. Our trade-mark consists of the word "Celluloid." The word "celluloid" was invented by Mr. John Hyatt at the time he invented the substance, and he did not protect it sufficiently, we are afraid. And we have reached a point now where the use of it has become so general that it has become generic and the lexicographers have incorporated it as a part of our language, and we are not certain whether we can protect it or not.

Mr. RAINEY. About how many employees have you?

Mr. CLARK. About 75,000, sir.

Mr. RAINEY. How many firms are engaged in the manufacture of pyroxylin plastics?

Mr. CLARK. I could not tell you. I know of five large ones, and we are making the larger part of the raw product.

Mr. RAINEY. Do you think the Underwood tariff rates injured the business in this country?

Mr. CLARK. They did, sir.

Mr. RAINEY. In 1899 the domestic production of pyroxylin plastics amounted to $1,526,572. In 1909, under the Payne-Aldrich Act, the domestic production increased until it amounted to $5,682,379. In 1914, under the bill which you say injured you so much, the domestic production was $8,876,509. Now, with reference to your exports: In 1910, under the Payne-Aldrich Act, which you say was particularly beneficial, your exports amounted to $1,189,080. In 1914, under the bill which you say injured you, your exports increased 25 per cent.

Mr. CLARK. That happened after the beginning of the war.

Mr. RAINEY. And in 1918 your exports had increased until they amounted to $3,744,745. So that the figures do not sustain your position at all that you were hurt by the lower rates of the Underwood-Simmons bill.

Mr. CLARK. They would if you consider the fact that Germany, who was the chief European competitor of America and made more pyroxylin plastics than all the rest put together, was out of business.

Mr. RAINEY. It was not out of business in 1914.

Mr. CLARK. It was out of business after the 1st of August, 1914.

Mr. RAINEY. And after the Underwood bill went into effect your business showed a marked improvement both as to exports and domestic consumption.

Mr. LONGWORTH. Was not that because the effects of the Underwood bill had not yet been felt?

Mr. CLARK. Of course the effects of the Underwood bill could not be reflected immediately, fortunately; but directly it got in its work, it was effective.

Mr. LONGWORTH. And the war came——

Mr. CLARK. And saved our life.

Mr. GARNER. Do you ask that the rate of duty be increased to cover the difference in the cost of production here and abroad?

Mr. CLARK. It is impossible to say what the difference in cost of production here and abroad is.

Mr. GARNER. If we could ascertain that difference in cost, would a rate of duty covering that difference be satisfactory to you?

Mr. CLARK. I should say it would be.

Mr. FREAR. How would you make the adjustment between the Japanese rates and the German rates?

Mr. CLARK. There would not be any way, unless the valuation could be assessed at the port of entry.

Mr. FREAR. Your competition is largely with Japan, I suppose?

Mr. CLARK. Yes, sir.

Mr. RAINEY. This entire schedule was inserted in the Underwood tariff bill to meet German competition. We had here assisting us, a German chemist who was a protectionist, and he was responsible for most of these rates. He presented it from the American standpoint, as a naturalized American citizen, and in his position as a protectionist. So if these rates in the Underwood bill were sufficient, in normal times, to meet German competition, the only thing that has happened since then, up to the present time, is that some 3,000,000 German workers have been killed and buried, and yet you gentlemen are all coming here under this schedule more frightened than you ever were. Nothing has happened since, except the death of the German workers, and you say that is going to make Germany more formidable.

Mr. CLARK. We think Germany is more formidable in an irritated condition than in a peaceful condition.

Mr. GREEN. I understand the competition you dread most is from Japan.

Mr. CLARK. Yes, sir; and we also dread it from Germany, because we have recently heard that the next conflict between Germany and the United States would not be with the sword but would be in commerce.

Mr. GREEN. With reference to what Mr. Rainey stated, it is the first time I ever heard the Underwood tariff bill was a protective tariff.

Mr. RAINEY. I did not say it was a protective tariff; I said it was a competitive tariff bill.

You say the danger from Japan is that she controls the supply of camphor?

Mr. CLARK. Yes, sir.

Mr. RAINEY. How are you going to remove that danger by putting up a tariff wall?

Mr. CLARK. Japan won't need to get pyroxylin plastic manufactured here, sir; she will make it herself. She is making it now.

Mr. RAINEY. You want Japan to sell you camphor, the raw material, from which you can make these pyroxylin plastic compounds and continue to sell those on the market?

Mr. CLARK. Yes, sir.

Mr. RAINEY. Did it ever occur to you that Japan might retaliate and put an embargo on this camphor?

Mr. CLARK. That might be entirely possible, and we could not ask this committee to help us in that instance, as we can now, with a tariff.

Mr. RAINEY. If you put on a tariff high enough to keep her manufactures of camphor out of this country, why can not she put an embargo against your raw camphor?

Mr. CLARK. Yes; but then we would die by her blow and not by a blow from our committees.

Mr. RAINEY. Then if we passed a tariff which would keep her manufactures of camphor out of this market and she retaliated by putting an embargo on your raw material, you would be out of business entirely?

Mr. FREAR. We have heard about those bugaboos before.

Mr. RAINEY. It is not a bugaboo; it may actually happen.

Mr. CLARK. We believe that is a potentiality, but we feel we would rather meet it the other way first.

Mr. FREAR. Where is camphor raised; where do you get it from largely?

Mr. CLARK. From Japan, from the Japanese islands of Formosa and the Chinese Empire, from the southern Provinces of China.

Mr. FREAR. Is the camphor from China controlled by Japan or the Chinese Republic?

Mr. CLARK. Chinese camphor is controlled by the Chinese Republic. Japanese camphor is controlled by the Imperial Formosan Japanese Monopoly, which is an imperial monopoly. No person may cut a camphor tree or distill camphor from the chippings of that tree unless he has a license from the Imperial Formosan Japanese Monopoly or the Japanese Government, and he must sell the camphor he does recover to the Japanese Government and they distribute it.

The CHAIRMAN. It comes pretty near being a monopoly, then.

Mr. CLARK. Exactly. Our business with them is direct.

BRIEF OF MANUFACTURERS OF "COMPOUNDS OF PYROXYLIN."

COLLODION AND COMPOUNDS OF PYROXYLIN.

The American manufacturers of pyroxylin plastic compounds understanding that there is to be an effort made towards a general revision of the tariff and realizing the great necessity for such action in their own industry, beg leave to direct your particular attention to paragraph 25, Schedule A, of the act of October 3, 1913.

At the hearings of this same committee held prior to the adoption of that act we appeared here and earnestly begged that such protection as had been granted to us in the Payne-Aldrich tariff of August, 1909, be continued and that no reduction be made. We pointed out that while our industry was purely an American one so far as invention and development were concerned, that our patents and chemical technique had been appropriated and that there had grown up in Europe and Japan a serious competition that was threatening our very existence. In spite of all our

arguments, based upon facts, our appeal was not heard and a radical reduction in the rates of duty on our commodity was made. Under the Payne-Aldrich tariff the rates of duty were as follows: Collodion, etc., 40 cents per pound; in blocks, sheets, rods, tubes, or other forms, not polished wholly or partly, 45 cents per pound; polished wholly or partly, or in finished or partly finished articles, 65 cents per pound and 30 per centum ad valorem.

Under the Underwood-Simmons tariff the rates of duty were as follows: Collodion, etc., 15 per centum ad valorem; in blocks, sheets, rods, tubes, or other forms, not polished wholly or partly, 25 per centum ad valorem; polished, wholly or partly, or in finished or partly finished articles, 40 per centum ad valorem.

Immediately upon the passage of that act the effect of this reduction was apparent. The American market was flooded with foreign material at prices with which we could not compete and our industry confidently expected to be wiped out.

We were saved by the World War, for it at once shut out Germany, France, England, and Japan more effectively than any tariff we might hope to ask for.

The war is over but it has left us burdened with heavy taxation. We are paying the highest wages ever known in the history of this country. Our raw materials are more than 150 per cent higher than prewar and the condition of foreign exchange is the most threatening menace to our manufacturers they have ever before faced.

Our European competition is very serious. The competition from Japan threatens to annihilate us. Europe and America are in a similar position as regards camphor, which enters largely into our commodity, but Japan rules the world as to this item. We are at her mercy when we buy camphor. She tells us how little or how much we may have; the price we must pay, and has systematically reduced our supply.

Naturally her control of this item has given her intimate knowledge of its use. Some years before the war the Japanese evidently coveted the pyroxylin plastic business, of which they had learned from their camphor distribution, and numerous factories were there instituted to make a home market for their camphor and at the same time control the pyroxylin industry. This effort was successful and made great progress up to 1914–15, when all but one of these factories were diverted to war purposes. Since the armistice there has been a general amalgamation of Japan industries and the pyroxylin manufacturers have recently been consolidated into a governmentally fostered trust, which is now spreading out its tentacles to monopolize the pyroxylin plastic business of the world. To-day the American market is flooded with circular letters and samples of materials offering Japanese material under the trade-mark of the Celluloid Co.

With the highest Japanese daily wage in any industry of 45 cents as compared with the American average of $5.25 in this industry, and Japan in complete control of the camphor supply, it does not take much imagination to see the great disadvantage of the American manufacturer.

It is evident from the statistics that the American pyroxylin plastic industry exports but a normally small proportion of its production. Its market must be essentially American, and should be preserved. We therefore call attention to paragraph 25, Schedule A, and respectfully request—

ITEMS AND PARAGRAPHS IN WHICH INTERESTED.

That the duty on "collodion and all other liquid solutions of pyroxylin, or of other cellulose esters, or of cellulose," be restored to "40 cents per pound," as in the Payne-Aldrich tariff.

That the duty on "Compounds of pyroxylin, or other cellulose esters, or of cellulose, whether known as 'celluloid,' or by any other name, if in blocks, sheets, rods, tubes, or any form whatsoever, unfinished, partially or wholly, as to surface, and not made into finished or partly finished articles," be fixed at 50 cents per pound.

Under the Payne-Aldrich tariff the specific duty under this classification was 45 cents per pound. Our request for this 5 cents increase is to protect us against the great disparity between wages paid in this and foreign countries and the increased cost in raw materials.

That the duty on these materials "if partially or wholly polished or finished as to surface, or if unfinished or partially finished articles or articles in which any compound of pyroxylin or other cellulose esters or cellulose is the component material of chief value, except photographic films, whether or not such articles are more specifically or generally described or provided for under some other classification by name or otherwise," be fixed at 60 cents per pound and 40 per cent ad valorem.

The specific duty here asked for is 5 cents per pound less than that allowed in the Payne-Aldrich tariff while the ad valorem duty is 10 per cent higher, for the reason that a large proportion of articles imported under this classification are light in weight,

and with the cheap foreign labor by which they are made, the chief protection is in the ad valorem duty and not the specific. We are therefore willing to sacrifice a portion of the specific duty on heavier articles to obtain this increased ad valorem on the lighter.

IMPORTANCE OF THE INDUSTRY.

The importance of this industry is apparent from the fact that $34,000,000 are employed in the plants of the four principal manufacturers, and it is estimated that $75,000,000 is a fair value to place upon the capital invested in the industry in this country.

This has been wholly developed since the invention of this material by an American, 50 years ago, and ground has hardly been scratched in the useful application of this wonderful substance.

It is impossible to accurately arrive at the total number of persons employed, but we think it a conservative estimate to place the number at 75,000.

The industry is closely allied to many important industries of the country, in that it is a large consumer of cotton, acids, alcohol, camphor, dyes, pigments, and various ther chemicals.

COSTS, WAGES, AND COMPETITION.

During the period of the war this industry, like others, has been subjected to such violent and spasmodic changes in the price of labor and material that the statistics of no considerable period are available to intelligently reflect the actual cost conditions. Neither can we furnish any data as to present European conditions that would serve any practical purpose, inasmuch as those factories have only recently resumed operations.

As to the Japanese labor conditions, it appears from the Nineteenth Financial and Economic Annual of Japan, issued by the Japanese department of finance, that the highest average daily wage paid to males above the age of 15 years in any industry enumerated is 90 sen, or 45 cents American coin on a parity of 50 cents per yen. We do know that American labor is from five to thirteen times higher than in Germany and Japan, the countries from which we suffer the severest competition.

SOURCE OF IMPORT.

The principal sources of imports are Germany, France, England, and Japan. The volume of such imports is not reflected in the statistics of imports and duties, for the reason that a large proportion of such imports are entered under other paragraphs than those applying to this material. For example, toys, formerly a German industry, and because of the war becoming an American industry, with a number of factories employing several thousand people, has since the armistice practically become Japanese, and this market has been flooded with all kinds of Japanese dolls and toys made from pyroxylin material, as can be observed in the stocks of any of the stores. The American factories have been unable to meet this competition and for some months have been practically closed.

These toys, made wholly of pyroxylin plastic, are imported under paragraph 342 (toys) at 35 per cent ad valorem.

The foreign manufacturers have absorbed the foreign markets, and this industry depends absolutely upon the American market for its existence.

CHANGES IN PHRASEOLOGY.

To make more clear the intent of paragraph 25 and to prevent as far as possible the importation of pyroxylin plastics under some other paragraph, we suggest the following phraseology, which upon comparison will be found to contain but slight changes from the present form:

* * * Collodion and all other liquid solutions of pyroxylin, or of other cellulose esters, or of cellulose, 40 cents per pound; compounds of pyroxylin or of other cellulose esters, or of cellulose, whether known as "celluloid" or by any other name, if in blocks, sheets, rods, tubes, or any form whatsoever, unfinished, partially or wholly, as to surface, and not made into finished or partially finished articles, 50 cents per pound; if partially or wholly polished or finished as to surface, or if in finished or partially finished articles or articles in which any compound of pyroxylin or other cellulose esters or cellulose is the component material of chief value, except photographic films, whether or not such articles are more specifically or generally described or provided for under some other classification by name or otherwise, 60 cents per pound and 40 per cent ad valorem.

SUGGESTIONS AS TO ADMINISTRATIVE FEATURES.

Few, if any, serious difficulties in our industry have arisen under the operation of the administrative features of the present law, but we desire to recommend a change in the present method of levying the ad valorem duties. In Article III, paragraph K of the administrative features of the present law it is provided that collectors of customs and appraisers shall ascertain "the actual market value and wholesale price of the merchandise at the time of exportation to the United States, in the principal markets of the country whence the same has been imported."

We recommend that this be amended to read that collectors of customs and appraisers "shall ascertain the actual market value and wholesale price of the merchandise of the same or similar character at the time of importation in the principal markets of the United States, and levy the ad valorem rates of duty on the value in the markets of the United States."

This change from foreign value to American value as a basis for levying ad valorem duties will place the imports from all countries on an equal valuation. It will reduce to a minimum the undervaluation of imports, and increase the revenue from customs duties. It will place all foreign producers on a fair and equal basis and afford to American producers an opportunity to place their goods on the American market on terms of equality with the products of foreign countries.

NATHAN M. CLARK,
Representing Pyroxylin Manufacturers' Association.
BERNARD W. DOYLE,
Representing Horn and Celluloid Manufacturers' Association.

JULIUS O. FOOTE, REPRESENTING THE EXELOID CO., STROUDSBURG, PA.

Mr. FOOTE. I represent the Exeloid Co. This company manufactures about 200 different items of celluloid. They range in size from about an inch in length to about a foot, and in value from about 2 cents to $2. They are articles which are blown into shape by air pressure in the interior of steel or aluminum dies. They are blown into shape, and then welded by virtue of the character of the material of which they are made. Celluloid welds under heat. They are pressed into shape, assembled, and painted.

We come under paragraph 25 of the act, by which we are accorded a duty of 25 per cent on the material itself, and 40 per cent when the material is finished into articles such as ours are, except when these articles are toys, under another section, I think 342, the duty is 35 per cent.

I note by the reports that have been printed that one of the representatives of the Celluloid Co. has addressed you generally upon the topic of celluloid, of which they are the makers and owners of the trade-mark on the name "Celluloid." All of these materials, by whatever name, are made under the so-called Hyatt patents, and they are about the same.

Unfortunately for us, the best celluloid is made in Japan, and the reason why the best celluloid is made in Japan is because they are enabled by virtue of their monopoly over camphor to put a very much larger percentage of good camphor into celluloid than we are.

Our problem is not so much with the raw material. We could, if we had to, work Japanese material, but we do not; we work material which is made by these firms whose names have been mentioned. We purchase from the du Pont Co.; we do not happen to purchase from the Celluloid Co. We also purchase from the Fiberloid Co., the Viscoloid Co., and the Nixon Nitration Works.

Mr. GARNER. Don't they purchase from the Japanese?

Mr. FOOTE. You must get your camphor from the Japanese.

Mr. GARNER. Then you could not buy from them if they could not get any camphor from Japan, could you?

Mr. FOOTE. Oh, yes; we could. We have. The Nixon Nitration Works used no camphor during the war. I would like to say something on that subject, if you happen to be interested. Here is the way they work it. I have this from your own consular reports that have come out.

The Japanese monopoly of camphor is a Government institution and that monopoly is owned by the same people who represent the manufacturers of celluloid, and the two things are worked or rigged together. The price of camphor is manipulated so that always the Japanese have an advantage in celluloid. If there should come to be developed a camphor substitute, down comes the price of camphor until the substitute is wiped out. There are three methods of making a camphor substitute, one German, one French, and one American. A company in Newark makes a material called "Ossacoid," which is fairly good, though not as good as camphor.

The German material is said to be equally as good as camphor. They have not made it for a number of years. The French material has not been made since the war. During the war the price of camphor went up so high that we used substitutes; the Celluloid Co. used them; everybody in America used them except the du Pont Co., and they had, by virtue of a fortunate purchase, a sufficient supply to last them through. So that in case Japan should—I don't believe they ever would, and there are reasons for that—if they should ever say "No camphor" it would be the best thing for American industry.

Mr. GARNER. You made a statement there a moment ago from which I gathered—if it is what I think it is, it is quite important. If I understand you correctly you say that when these substitutes are manufactured, are beginning to be manufactured in any quantity, the camphor goes down until they put these substitutes out of business. Did you mean to say by that that if you begin to manufacture a substance here that takes the place of camphor in your industry, camphor is dumped over here and is sold at such a low price that it soon puts you out of business in that particular?

Mr. FOOTE. My source of information as to that is Mr. McIntosh, of the Organic Salts & Acids Co., of Newark. I know nothing of the business whatsoever except that Mr. McIntosh says that is the case. I know what the fact is. I know the fact was that the Organic Salts & Acids Co. was selling their Ossakoid, which is triphenol phosphate, something which is synthetically made to imitate the effect of camphor in this material, and when their price started to come even with the market and the supply—that is, the market established by camphor by the law of supply and demand—camphor dropped so that the price of camphor and the price of Ossakoid became equal at about 7 cents a pound. The result was that every manufacturer that I know stopped using a large percentage of Ossakoid.

Mr. HAWLEY. Could a manufacturer when that occurred, the price of camphor and the price of Ossakoid being 7 cents a pound, get an unlimited quantity of camphor, or was he limited in the amount he could buy?

Mr. FOOTE. Oh, camphor flooded the market until every speculator in it lost out entirely. Camphor came down perpendicularly from something like $2.25 to something like $1.10.

Mr. GARNER. Who was the man you got this information from?

Mr. FOOTE. It was told me by Mr. McIntosh, of the Organic Salts & Acids Co. They actually developed during the war a very decent substitute for camphor.

Mr. GARNER. The reason I want this information is that I want it to go into the record for the benefit of the Tariff Commission—probably they have the information—that if there is a company which owns a monopoly of an essential industry that goes into the manufacture of various articles, and it pursues the policy that you have suggested is being pursued by the people who own camphor in Japan, whether it be the Government——

Mr. FOOTE (interposing). It is the Government. The Mitsui Co. handles the Formosan camphor monopoly. It is a Government monopoly, a Government company as much, for instance, as the Shipping Board is a Government company here.

Mr. GARNER. What I was getting at is, if that could be demonstrated as an actual custom of a nation toward another nation, if the other nation developed a substitute that was not quite as good, for instance, as camphor, and then the first nation undertook to come in and destroy that industry that had been developed by dumping its stuff in here, I think it would be quite important for Congress to consider the question of protecting itself against another Government, possibly in a different method than through the customhouse, and that is the reason I would like to have that information, if we could possibly get it with absolute accuracy, to go into the record at some time.

Mr. FOOTE. I will be pleased to write letters to the two companies that make it. I have the names, the records of the companies which manufacture these two substitutes, one in Paris and one somewhere in the neighborhood of Berlin, the Berlin company having manufactured a long time before the war, and it was common talk in the trade in 1916 or 1917 that the development of a camphor substitute was a hopeless thing because of the situation I have spoken of.

Mr. GARNER. In other words, the same policy is pursued by Japan, which owns a monopoly of camphor, as to France and Germany, that it pursues here?

Mr. FOOTE. Oh, yes; that is their plain business judgment, to see that camphor has a monopoly of this so-called solvent process.

Mr. GARNER. Wouldn't it be also the plain business judgment and duty of another country to see that that unfair method of trade was not followed in its own country?

Mr. FOOTE. That is not for me to say. I should think that the proper protection of that might be considered.

Our problem is with the raw material, of which camphor is one of the elements. Mr. Clark has covered that. I say that in passing because it affects the quality of the celluloid that we get. Japanese celluloid is sometimes, for some purposes, of the better quality.

Our situation is difficult, for three reasons: They have the cheaper sheet stock; they can make it cheaper; they have also in that a Government fostered monopoly. The concern is called the Dai-Nippon Co., and so far as their policy is concerned I had the pleasure of

being introduced to the director, who came to the United States to look into the matter, and he looked straight at me and said that they would put the material in this country at a price that would sell it, if they determined to do it.

Mr. GARNER. You are not suggesting now that we have a tariff on the raw material, on camphor, are you?

Mr. FOOTE. I am not suggesting that. You see our position from a selfish standpoint would be better if we got the sheet stock without any duty at all. We don't suggest that.

Mr. GARNER. But if we wanted to get the substance in this country for the purpose of taking the place of camphor, the customhouse would assist in developing that industry, would it not?

Mr. FOOTE. I think so.

Mr. GARNER. And possibly prevent the Japanse Government from adopting this unfair method of doing business.

Mr. FOOTE. Possibly. Further than that, it is said that the Du Ponts have planted large areas in the South with camphor trees for the purpose of having a domestic supply of camphor. Those trees will not come to fruition for some time—that is, so far as producing commercial camphor is concerned. Camphor is a substance that might merit somebody's investigation and attention with some profit to the country. We, of course, are concerned only with a toy, a doll, a float in water, an automobile device.

Our problem is one of getting good raw materials and then manufacturing in such a way as to compete with Japan. Now we have three difficulties—first, that their sheet stock is cheaper. They can make it cheaper because of these things: They have cheaper raw materials all along the line; then they have a factory system made up of little factories at home; and then the third thing is the utter cheapness of their labor.

I have had brought from the Congressional Library a Report on Japanese Labor by Oswald White, Japanese vice consul at Osaki, which takes up the subject in detail. No man can read that, whatever his opinion or his feelings on the tariff or whether we should live under a protective system or not, without feeling that if we have an industry that we desire to live as ours does—we are now in this business——

Mr. HAWLEY (interposing). What period does that report cover?

Mr. FOOTE. It comes up to the end of 1919, I think. The date of it is 1920. He compares wages in three periods, the period before the war, the period during the war, and the 1919 period, which they consider the after-war period. I can give you some graphic figures on that in just a few seconds. Now, there is the only thing that we have to go against, and that is the only thing that we can think of. I could visualize to the members of this committee in a moment the whole subject.

That which we can make, for instance, to sell for $10, they make and sell for $4. The people that we pay an average of $4 a day to, they pay an average in 1919 of 80 fen, which is 40 cents at the most—39 cents. They pay their girls 27½ cents a day—that is, grown girls. The younger girls they pay something like 12 cents a day. Under the laws of Pennsylvania, under which we operate, 54 hours is the limit of work. Our girls work 51 hours. There is absolutely no limit of labor in Japan, except in the cotton industry, where girls are

prohibited from working more than 14 hours a day, 7 days a week. In other words, their maximum is 98 hours a week in factories. At home there is no limit, and in this report they say that you can see children running around doing their work in their hands as they play.

In the shell business, where they make little shell buttons, one family, everybody in it, cuts out shells, another one polishes them until that material comes here and we say to ourselves: "Why this costs no more than raw material costs here. It is impossible to compete."

In our business four million dollars' worth of small Japanese toy articles were imported in the last 12 months. Our firm covers this whole United States with seven or eight salesmen, and they make reports of what they see in Kresge's and Woolworth's stores. That whole four million dollars' worth of goods could be manufactured in this country without the slightest loss to anybody; the thing is now that we manufacture them not at all.

We have just finished making some beautiful little dolls about the length of your hand. We have dropped that entirely, simply quit! Why? The minute that those dolls were made the samples were taken from the United States to Japan and duplicated. That can be done very easily because all you have to do is to make a plaster cast of them; and they make an identical duplicate of it, the same as you would make a plaster cast of the features of a living person; and back our doll comes not at $9.50 a gross, which we wanted to sell them for 10 cents apiece retail, but that doll came in for $4.75.

We make a little bird for favors that balances itself anywhere you put it. Our price on that during the war was $4. A little reduction in labor came, which brought it down to $3.60. Two of us competing together, manufacturing the same item, made it $3.50. We know that the other man can not make it for less than $3.50, so we can stop at $3.50. What happens? In the New York market to-day those birds are being offered for April delivery at $1.75 a gross.

The CHAIRMAN. We have about a dozen other witnesses this afternoon, Mr. Foote. We will give you five minutes more.

Mr. GARNER. He is making really a more interesting statement probably than we might hear, without reflection on any other witness. He is really giving us some information.

The CHAIRMAN. Yes, he is; and I don't like to cut him off, but we have 12 other gentlemen to hear this afternoon and we will have to limit Mr. Foote.

Mr. FOOTE. To summarize the thing, the report on Japanese labor is the thing that I should like to call to the committee's attention. If anybody can take up Mr. Oswald White's report, or Mr. Horn's report, and say that we should not have protection, then we are perfectly willing to abandon that business and go to something else that the Japanese can not make—start anew. But we have established the industry; our girls are working, and if we want to keep them working we have got to have some additional protection on small items and small articles.

The CHAIRMAN. Do you have a schedule of rates to file with your remarks that you would suggest?

Mr. FOOTE. I am going to make a suggestion, and that suggestion will be a specific duty on all items selling, for instance, under $6 a

gross. Give us 2 cents apiece on those, from 6 to 12 cents apiece, so that we are absolutely protected against undervaluation, which is the worst disease of the lot, and if that is done, if these gentlemen—I have noticed that one of your committeemen feels that the celluloid industry has prospered despite low tariff. That might be true with the sheet industry, but it is absolutely impossible for our industry, which is new, only seven years old, brought from Germany and Austria seven years ago—it is impossible for it to live one day longer than the Japanese can bring in the stuff that they are now bringing in, and I can say in the few moments that have been allowed me—thank you for what you have extended to me—that you should have brought before you the facts that are in this report on Japanese labor. All of this work is done practically by hand. The eyes are put on, they are painted by hand on all these dolls, and unless we can have some adequate protection for our girls there is nothing for us to do but to tell them they had better go back to the farm where they used to live before the war period.

Mr. HULL. What would the ad valorem equivalent be under the Payne-Aldrich bill?

Mr. FOOTE. It must be a different system from the Payne-Aldrich bill.

Mr. HULL. What would the ad valorem equivalent be?

Mr. FOOTE. The actual ad valorem would be an additional 33⅓ per cent. It must be higher than the Payne-Aldrich rates. The Payne-Aldrich rates would do us no good. All they have to do to escape the increase in your present duty under the Payne-Aldrich rate is to have the goods $1 less per gross.

Mr. HULL. What is the date of the consular report you refer to?

Mr. FOOTE. It is dated 1920, and it is No. C. M. B., and the figures run into as late as June, 1919.

The CHAIRMAN. Before the war where was that competition? Where did that come from?

Mr. FOOTE. This industry did not live before the war.

The CHAIRMAN. Not abroad?

Mr. FOOTE. It lived abroad before the war.

The CHAIRMAN. When the Payne-Aldrich bill was created where were the imports coming from?

Mr. FOOTE. From Germany.

The CHAIRMAN. And that business has now been transferred to the Orient?

Mr. FOOTE. We have some German employees in our factory and they have brought to the superintendent dies and said to him: "I made this die myself in Germany in 1910." They have transferred the industry directly from Germany to Japan.

The CHAIRMAN. So now the business has been transferred to the Orient?

Mr. FOOTE. Seven million dollars worth of that kind of goods came in last year, including pearl buttons and tooth brushes.

The CHAIRMAN. I wish you would, in the brief that you file, explain those differences as fully as you can, so that the committee may be benefited by your information.

Mr. FOOTE. I will file that under another schedule, under the metal wares.

Mr. GARNER. Let us have that consular report there. Leave it with the reporter and have it identified in the record so that we can find it.

The CHAIRMAN. We will have it printed in the record in full.

Mr. FOOTE. I am going to summarize this in my brief and give you the pertinent figures.

The CHAIRMAN. The next witness is Mr. Ludwig Gaschritz.

Mr. FOOTE. It will not be necessary for him to speak. I have covered that ground.

Mr. DICKINSON. Mr. Foote, you spoke about this camphor tree being started, the growth of it, by the Du Ponts, somewhere in the South. Is that in Florida?

Mr. FOOTE. Yes, sir.

The CHAIRMAN. Could we see some of the samples that you have there?

Mr. FOOTE. Yes, sir; I will be glad to show them to you.

The CHAIRMAN. We would like to have the gentlemen of the committee see them. Are they all American manufactured?

Mr. FOOTE. All that you see there are American manufactures. I have some of the Japanese.

The best way to visualize the whole thing is this [indicating two celluloid birds]. This is a Japanese article which I want you gentlemen to look at, which they are offering to the importers for $1.75.

The CHAIRMAN. Per gross?

Mr. FOOTE. Per gross; yes, duty paid, landed in the United States for April delivery.

This happens to be the color of another one [indicating]. They are made in all colors. This is an American article which we three manufacturers are selling for $8.50.

The CHAIRMAN. Mr. Foote, will you let me see that little sample of the bird that you have?

Mr. DICKINSON. Let me ask a question there about this tree growing in this country. Have you any impression as to whether the camphor tree can be successfully grown in this country?

Mr. FOOTE. They say that undoubtedly it can be successfully grown in this country, not only in Florida but in many of the other southern localities; that it can be grown anywhere along the Gulf.

Mr. DICKINSON. Then there are no conditions peculiar to Formosa and to its location that makes it better adapted to the growth of these trees than the southern part of the United States?

Mr. FOOTE. The tree is adapted to grow in climates which are like that of Formosa, and the climate we have around the Gulf is of a similar character.

Mr. DICKINSON. Is Formosa farther south than Florida?

Mr. FOOTE. I should think it is farther south, but the conditions of ocean tides are different. Formosa is somewhat to the south of Japan, as I remember it.

Mr. DICKINSON. And there is no good reason, so far as your information goes, why the camphor tree could not be grown in southern California or in Florida, as well as in Formosa?

Mr. FOOTE. Well, in time, which is 25 years, I think, for this tree to come to fruition, we can tell. The Du Pont salesman said to me not long ago: "If you have patience we will grow camphor yet. All we need is time."

Mr. DICKINSON. I am very glad to have that information.

Mr. GREEN. I think there is some claim that the American culture is a little different than it is in Asia, where they often destroy the tree to get the camphor.

Mr. FOOTE. The life of a camphor tree is going to be short anyway. They simply cut down the trees over there. They send men out into the woods with a little stove and one man cuts and one man carries a rifle to keep the savages off, and the man that cuts gets 2 yen a day, and the man that guards with the rifle gets 3 yen a day, and they simply cut the tree down and chip it off and cook it, something like you cook turpentine, and that is dragged out of the wilderness and then dragged to civilization. They are cutting down their trees very much faster than they are growing.

Mr. DICKINSON. In Formosa?

Mr. FOOTE. In Formosa, yes. They are grown in the wilderness, and reforestation there has hardly been started.

Mr. GREEN. They claim, I think, that it is not necessary to cut down the tree?

Mr. FOOTE. No, the tree can be treated, so I have been told—I don't pretend to be an expert on this—that the tree can be bled to get the camphor out of it.

Mr. DICKINSON. Like a sugar tree?

Mr. FOOTE. The simile was made to me of that, that you simply bleed it like you do turpentine.

Mr. GREEN. I was under the impression that instead of doing that they could take off a certain proportion of the twigs, not enough to kill the tree, but so that it would give a new growth next year.

Mr. FOOTE. The information that I have on that subject is also contained in some Government documents which ought to be available—these wonderful librarians can find those things very quickly. I read it in some documents when I came down here to Washington about a year ago and got a copy of it. I don't know what has become of it now.

Mr. GREEN. I think it is in the tariff information.

Mr. FOOTE. These things that I show you will visualize our problem. Here is something that is absolutely new [indicating]. We can not patent it because we have been advised that it is not patentable. What has been made in wood can be made in celluloid and is not patentable. It is a little whistling bird, a warbling bird, which has been made of pewter since I was a child. Now we make one out of celluloid. I don't know what it sold for—this is a 5 cent article which is sold by us at a maximum of $3.75 a gross. Now just as quick as that gets to Japan, by July they will be offering to import that very article at $2, say. Then if they can't get business at that price it will go down to $1.75. One of the reasons why they can do that, you can also visualize, is this, that material is better [indicating]. The thickness of celluloid stock determines its cost. Our stock has to be 20 to 25 per cent heavier, even 50 per cent heavier than theirs, for two reasons: First, a greater camphor content in the material which makes it more ductile; it draws easier under heat and pressure; second, because their labor is careful; our girls are careless. These things break easily and we can not do anything about it. We can not throw them out to starve like they can in Japan. The girls in Japan are under a whip. They are under the whip of necessity and their

percentage of waste is very small. We understand that in the best regulated factory in the United States making these goods, which is said to be equal to any factory in the world, their percentage of loss is 15 per cent under the best conditions. The proprietor of another factory told me his loss was about 20 per cent but he expected to improve it.

Our loss in a new country—we moved our factory away from Newark because we could not compete with the war industries there during the war—we took it up to the tops of the Pennsylvania hills, up in the Pocono Mountains, and we find that when you first put a girl on this work she will ruin as much as 40 per cent, and our percentage has been between 20 and 22. Now, that is 22 per cent actual physical loss, which equalizes a great deal of duty in itself.

Then the Japanese have their method of keeping their scrap together. They are people that are careful and don't waste anything. Every little thing can be saved with them; we can not do that. Our people could not do it, and we have the option either of operating under conditions as we find them or going out of business. That is our situation.

We have only been in this business, all of us—for your information, I will tell you who are in the business. There is the Viscoloid Co., one of the multimillionaire celluloid companies that makes its own raw material right straight down to the finished article; there is a firm in Boston by the name of Mark Bros., a small concern; there is a firm in Brooklyn by the name of Sametz (Inc.), and there is ourselves in Stroudsburg, Pa. The latest information is that the industry has started west, that new factories have opened in Chicago and in Louisville to make these same things, and one in San Antonio, Tex. I think the name of it is the Luthy Hydrometer Co. They are making them down there. That is the only southern factory I know of.

We are all new concerns and we must have a special tariff to break our people into this work. We employed last year 375 girls.

When this doll, this one here [indicating], got to Japan we had to lose it. We lost it completely. We have not sold one of them in this form since the doll came back from Japan. We have simply abandoned the die and everything else, and have laid it aside. We are working off the few that we have left. We employed 375 girls last year; now we are employing one shift on full time, about 125 people altogether. The minute we are told that we can go to Woolworth and Kresge and say to them, "You are not going to get any fall deliveries from Japan because there is going to be a tariff," we can go to work immediately. We are certainly babies in this business; we are an infant industry and if we have this protection we can put 250 additional people to work, and between the four of us and what new factories can be started within two years we can absorb the entire $4,000,000 worth of imports of these particular small items, and the amount of labor in this article represents more than 60 per cent, even under our method of making them. We make them mechanically, and yet labor is 60 per cent of the cost. A computation shows that our raw material costs are 40 per cent of our total outlay. Now 60 per cent is the labor in the factory, and outside of the factory, and in our little town of twenty factories working, we

are the only one working on full time, and we can hold our little town in a fair condition, keep the banks feeling that everything is all right, as long as our factory is going, and the only way we can do that is by getting a duty on this character of goods. Now I don't say that we are the only ones; the same is true of the letter openers that you see; the same is true of any kind of a favor that you use which is in a flat shape, of a pin wheel, of an ornament that people hang up, bell ornaments of various kinds hung in the houses. That entire industry can be held in its place without doing anybody any harm except the poor Japanese laborer. He won't have the job, of course, if our girls have it, and so far as I see it, it is a question of whether we could get the tariff protection that we need to keep these articles going or abandon this business entirely.

Mr. GARNER. Let me ask you about that doll that you spoke of, this little whistle that you sell for 5 cents. This is it, I believe [indicating].

Mr. FOOTE. Yes, sir.

Mr. GARNER. Now you sell it for $3.75 a gross?

Mr. FOOTE. Yes, sir.

Mr. GARNER. And Japan comes in here and sells it for $2 and it still sells at 5 cents, doesn't it; I mean at retail?

Mr. FOOTE. It sells at 5 cents at retail, but these are not all sold at retail.

Mr. GARNER. Well, I understand; but the ultimate consumer buys them at that.

Mr. FOOTE. Oh, no. For instance, you put these around as favors at a dinner, and they are sold at so much a dozen. These things, we call them "5-centers" and "10-centers" in our market. If you go to Mexico City you would probably pay a quarter for this [indicating], but it has passed through about a dozen hands. This is probably sold for 10 cents in most places. It is only the big consumer that can afford to sell it for 5—where they order a thousand gross at a time. The difference in the handling of these things makes a very large difference in the selling price.

Mr. GARNER. The difference between Woolworth and the small purchaser?

Mr. FOOTE. Exactly. That is the main difference. Now we are just commencing to develop this celluloid for a thousand different uses. During the war we made a battery jar of celluloid for airplanes. The rubber jars would break when the airplanes came down, and we succeeded in making one out of celluloid that was jarproof—that is, you could hit the ground with it and it was elastic and did not break at all. Now, just as quick as things settle themselves, we are in communication with various large factories, and the chances are that that item will develop. We have received a contract for the making of little floaters in automobile tanks, instead of making them out of metal—these balls that go in the water supply of toilets, that float. Celluloid is lighter than anything else that can be made, and they are making them for that purpose.

There are thousands of these articles that we can make if we are protected. If we are not, people will go to Japan and get them made. For instance, in the toothbrush industry, making cheap toothbrushes. Mr. White says that there are records that a girl gets as little as three-twentieths of a cent, a sixth of one cent, for putting bristles in

a cheap toothbrush. Irrespective of my opinion on the protective tariff system, or that of anyone else, or whether this celluloid industry should be protected generally, if we are to have Americans working at this industry they must have something to equalize the standards of living between what the Japanese live on and what we live on.

Mr. WATSON. Mr. Foote, even if there should be a tariff, will you be able to sell the American-made goods at a higher rate than the Japanese are selling, on account of their being made in America?

Mr. FOOTE. Where the price is even the American goods will be chosen every time. The American design of goods brings them nearer to the conventional American mind, and the person who buys, buys what is most familiar to him. In other words, it is made nearer to his own home idea, but where the price is more than 10 per cent apart, sentiment and conventionality fall out of the buyer's mind. He buys the article that he can sell. There is their 5-cent battleship and here is our 10-cent battleship [indicating].

Mr. WATSON. So you would limit it to 10 per cent?

Mr. FOOTE. I think about 10 per cent. We found that from experience.

Mr. WATSON. You have found that Americans will pay 10 per cent more for American goods?

Mr. FOOTE. The American people pay a good deal more than that, but the original buyer makes it about 10 per cent. Here is a battleship that we copied from some cruiser design that we found, and here is their battleship [indicating]. But that doesn't protect us any. This is going to be the battleship that we are going to have in three months [indicating American design]. This battleship they are going to make just as quick as it gets to Japan.

One of our associates sent to Japan to get dies of a little polar bear like this [indicating] which they copied from the Germans—and the lines of it, you notice, are very good. The dies that cost us in our plant up on the hills, where we pay men not $1.25 an hour but 80 cents an hour and no overtime—our superintendent, who is the best man in the United States on this work, the best man in Germany before he came here—the man who brought the industry here—brought those dies over and they have just been delivered. Their price for those dies was $60 and our price for the dies was $300. You see it is not only the labor condition directly on the article, but the labor at the dies; every item of labor that goes into the making of it.

So if an infant industry ever needed to be protected, this is the one. I would not come down here and obtrude myself upon the attention of so important a committee about a concern that only does at most about half a million dollars business in the year, unless I thought it was something that ought to be drawn specially to your attention, because irrespective of anything else I think everybody is agreed that the small industry should be protected while it is growing, and Mr. Clark told you that there was a perfect flood of these toys on the market. Mr. Clark is absolutely right. We have been deluged with them, and our production of the items has ceased completely in 5 cent articles, except these two new ones [indicating]. We have stopped making them. We can not compete with them at all in the smaller items, and it is on the smaller items that we require a special tariff. On the 25-cent doll they know quality, as the gentleman there says, and on the big items the pro rata is lost. So if we got the

minimum duty of 2 cents each, or a cent and a half on the smaller items, and then 3 cents and then 4 cents up to a place where an article would sell for 50 cents, beyond that quality would tell the tale.

Mr. GREEN. Would this tariff that you are asking for make any appreciable difference in the retail price, do you think?

Mr. FOOTE. No; the retail price would be exactly the same. We compete against a price. That is all we have to compete against. If you go, for instance, to Kresge, you can not sell them a 10-cent item for any more than they can buy that item for and sell it for $14.40 a gross.

Mr. GREEN. They sell it for 10 cents.

Mr. FOOTE. They must sell it for 10 cents, irrespective of what it is. We try to make it as big as we can. You see we were fortunate enough to have a decrease in the price of celluloid about three months ago. We have not decreased our prices a bit, but where we used to make goods out of 12½ one thousandths thickness, we immediately increased the thickness to 15 one thousandths, which made the raw material cost us 20 per cent more than if we used the other, but it gave them a better article, and as prices go down we will continue to give them a better article.

Mr. GREEN. You think then the ultimate consumer would not suffer?

Mr. FOOTE. No; he only pays 10 cents for his toy, or 5 cents or a quarter, just the same.

Mr. TILSON. The only difference is whether we make it at Stroudsburg or the Japs make it in Osaka.

Mr. FOOTE. The only difference is whether or not we take those girls that we picked up and trained, that never had been in a factory before, and did not know what it was—they used to call it the "kindergarten" of the mountains when we first took hold of it—whether we are going to send those girls back to their mountain homes or whether they can have at least one good pair of shoes that they wear on Sunday nowadays.

REPORT ON JAPANESE LABOR BY OSWALD WHITE, BRITISH VICE CONSUL AT OSAKA.

INTRODUCTORY.

Japanese labour is usually summed up as being cheap in price and poor in quality and, as a rough generalisation, this judgment may be accepted. It is evident, however, that to say so much is not to settle the matter once for all, for the following question immediately arises: Is this poor quality due to an inherent inferiority of material, or is it merely incidental to the relatively low value placed upon it compared with other agents of production? The rise in standard of certain of Japan's more important manufactures, notably in cotton piece goods, while largely due to increased experience on the part of management, seems to argue that the defects of Japanese labour are not all of them of a radical nature. The following memorandum may, perhaps, help to indicate to what extent inferior labour is due to the present conditions of Japanese industry, and may be expected to improve with the course of time.

Certain facts with regard to Japanese labour strike the foreign observer. (1) The first is that it is plentiful; labor-saving devices are conspicuous by their absence, and a hundred and one operations are done by hand that could be done more expeditiously and more cheaply in the long run by machinery. (2) One reason that labour is so prodigally used in the place of machinery is that installation costs of the latter are high; wasteful methods continue therefore in order to save a heavy initial expenditure. (3) Want of capital then is the main cause, but there also appears to be a certain lack of foresight on the part of management which fails to see that imme-

diate profits gained by over-working machinery and labour are obtained at the expense of future efficiency. (4) The smallness of the home market for Japanese goods renders industry extremely sensitive to changes abroad, and labour suffers from the violent vicissitudes to which Japanese industry is subject. (5) The general conditions—plentiful labour, dear machinery, over-rapid expansion of industry—make for low efficiency on the part of labour. (6) Other reasons of a social nature also tend to check the progress of labour. (7) For all these reasons, labour receives low wages and economic conditions react on efficiency. At the same time, the development of industry and trade in Japan adds to the wealth of the country, and all classes benefit, even if disproportionately, so that it would be a mistake to regard the working class as standing still.

PART I.—QUALITIES OF JAPANESE LABOUR.

A. PHYSICAL.

Strength.—The average Japanese workman, though short in stature compared with a European, is strong and well-developed and capable of working long hours at a stretch. In the case of work requiring great physical strength and stamina, as in certain parts of shipbuilding, &c., it has been stated that he falls short of the European, but on the whole sturdiness and endurance are leading characteristics. For these he has, no doubt, to thank his peasant ancestry. How far this legacy will stand the strain of factory labour remains to be seen. The military authorities have frequently drawn attention to the very low average of military "fit" shown by the yearly recruits from Osaka.

That the conditions of labour have hitherto been such as to react disastrously on the physique of the employed and their dependents admits of little doubt. In most cotton-spinning mills, for instance, the treatment of the female operatives in its disregard of matters of hygiene was formerly as short-sighted as it was cruel. Great improvement has taken place, the leading mills setting the example, but the treatment in the small mills is said to fall far short of the ideal. Provision was made in the Factory Law for the abolition of night labour for women and children, but the spinning mills were successful in obtaining exemption for 15 years.

Health.—Sanitation in Japan is backward. There is no sewerage, and drainage is poor. Nuisances abound, and are accepted as a matter of course. At first sight it would appear as though long familiarity with insanitary conditions had rendered the people immune. On the other hand, epidemics are frequent, particularly in Osaka, and claim a heavy toll. Cholera in 1916 was responsible for 991 deaths. This at least was the number of cases reported. In other years there were outbreaks of plague, but measures taken for the stamping out of this pest have been so effective that it would appear to have disappeared.

With regard to general health, mortality of infants is high. There is one still-birth to every eleven births. In 1914 there were 286,678 deaths of infants under a year old, and 149,564 of infants between 1 and 5. In the same year, tuberculosis was responsible for 113,000 deaths, pneumonia for 84,000, and dysentery for 118,000 out of a total of 1,102,000 deaths. On the other hand, the birth-rate is also high, births in the same year being 1,832,000.

Manual Dexterity.—The Japanese, as a whole, are very skilful with the fingers. The talent does not appear to help them much in factory work, where the mechanical part is done by the machinery, but it serves in good stead in the making of such goods as buttons, toys, glass manufactures of various kinds, &c. In particular, the women are very nimble-fingered and work fast at sewing, plaiting, match-box making, the drawing of brushes, and many other industries where deftness is the first essential. In regard to accuracy, the results are poor, but I am told that in the better class of works the workmen can turn out accurate enough work provided they are kept at fine tasks and not occupied partly at rough and partly at fine work.

B. MENTAL.

Docility.—The managing director of a leading cotton mill whom I asked what were the merits and demerits of Japanese labour, put obedience in the first class and apathy in the second. The docility of the Japanese workman has been already referred to. He will work long hours without complaining. This is, of course, an excellent trait and one which renders him easy to handle. On the other hand, it seems to involve a lack of interest in the work. The workman has no keenness over his job, and tends to do it in a perfunctory manner.

Apathy.—This apathy is probably largely the result of economic conditions. The workman is forced to work long hours on a pay which affords him a bare subsistence,

and he lives too often under conditions which lower his vitality. The result is bad work. He works uncomplainingly also, not because he feels he is getting a square deal, but because he is accustomed to submission. This attitude kills all interest in the work.

At the same time, it has been suggested by foreign observers that this apathy may be partly constitutional, due possibly to a lack of nervous vitality. This again might be set down to the humidity of the atmosphere; the ravages of tuberculosis have already been noted.

Cheerfulness.—After speaking of apathy it may seem paradoxical to mention cheerfulness as an asset of the Japanese worker. It remains to be seen whether this trait will be proof against the hardship of factory life, but the Japanese certainly shows a contented and happy disposition under drudgery that would be insupportable to a Westerner. Possibly it is protective armour which he has acquired from centuries of submission and toil, while apathy is the reverse of the shield.

Lack of Concentration.—The long hours of the Japanese workman are discounted by the inability to concentrate. He takes frequent breathing spells. In work of an arduous nature this is necessary, but it is also to be observed in lighter tasks. How far this again is constitutional, what proportion of the blame should be ascribed respectively to fatigue from long hours and to a low diet, it would be hard to say. That it is largely due to external conditions seems to be proved by the fact that the Japanese workman in business for himself is a marvel of industry. He, too, works from morning till night, but the apathy and "absence" of the paid worker in the factory is not in evidence.

Imitativeness.—A prominent quality is the quickness to learn. The astonishing development of industry on foreign lines within the last ten or twenty years could not have taken place had it not been for the ability faithfully to copy Western methods. Workmen taught a particular task soon acquire a degree of skill. It is said that they require constant supervision or they become slovenly in their work, but this is no doubt due to the want of interest spoken of above.

Matter-of-fact Nature.—What apparently goes deeper is an absence of originality. The Japanese has been spoken of as matter-of-fact rather than practical. He is quick to grasp an idea, but is apt to be content with externals. The workman can do his job admirably, but he is bewildered by anything out of the ordinary; he fails in a crisis, he has to be led. Similarly in clerical work the average employee is wonderfully painstaking and meticulous, but he works best in a groove. Even in higher ranks a certain lack of imagination is occasioally to be seen, as where a new company is started and the prospective income and expenditure for some years to come are worked out to two points of decimals.[1]

A weakness then is a tendency to ignore essentials. The workman is likely to get better results from simple than from intricate machinery and striking rather than elaborate improvements of the same. His talent is seen best in faithful reproduction down to the smallest, even unessential detail.

Excitability.—It arises perhaps from this quality which at its best may be described as mental alertness and at its worst as superficiality that the Japanese workman, in common with the rest of the nation, is excitable. Storms arise very suddenly from a blue sky. Once the danger point is passed they subside rapidly. This mental characteristic makes the Japanese workman somewhat easy to play upon and has an important bearing upon the question of organisation.

General Intelligence.—The question of intelligence is a difficult one. The standard shown by the average workman is admittedly low. It could hardly be otherwise under present conditions. The only point at issue is whether the low standard is inevitable. Observation seems to show that it is not. For one thing the quality Japanese goods is steadily improving. However much this may be due to greater experience of management, some of the credit must go to the workmen. Further, a distinct difference of type is observable between the employees of the more up-to date and of the ordinary works. If then the Japanese workman responds to better treatment, it is not unreasonable to suppose that the present low standard of intelligence is due, if not wholly, to a great extent to environment and will disappear with improved conditions.

That is for the future. At present the average Japanese workman is apt to show the most startling lack of common sense. Accidents caused by rank carelessness are all too frequent. Workmen will hoist up machinery weighing several tons with old rope. It is difficult to get miners to take the most ordinary precautions. Nine-tenths of this carelessness is due no doubt to ignorance, but absolute callousness plays its part. It has been remarked that Eastern nations generally are less sensitive to pain than

[1] An instance is to be noted in the table quoted in Appendix C where the statistician after obtaining the average number of persons in a family by dividing, it is to be presumed, the total number of persons by the number of families reverses the process later with the extraordinary result that he now quotes the number of persons to one point of decimals.

Western. In Japan this characteristic appears to have been fostered by the social system. The military were trained to regard their lives as of no value, while the lower classes learnt in the bitter school of experience that their existence counted for little in the social scale.

If they value human life lightly, Japanese workmen rate machinery still less highly. The average mechanic is apt to give little thought to the careful starting and stopping of his machine, but will start it and stop it with a jerk and generally will shorten its life by the harshness of his treatment of it.

Part II.—Organisation of Japanese Labour.

Transition.—In order to understand present industrial conditions in Japan it is necessary to remember that she is in a state of transition. Forty years ago the factory system was unknown; everything was made under the domestic system. Since that time factories have come into existence, progress after the war with Russia, and in particular in the last five years, being especially rapid, and Japan is rapidly acquiring an important position among manufacturing countries. Many consequences, evil as well as good, result. She has had a supply of cheap labour to draw upon which has caused her to devote a considerable portion of her energy to the making of cheap goods—matches, buttons, braids, toys, &c. At the same time plentiful labour has meant low wages, and low wages, with all the attendant circumstances, have meant poor work. It is against the evils of this system that Japan is now struggling. The point will be referred to again later.

Scarcity of Skilled Labour.—The supply of labour is plentiful, but skilled labour is scarce. This is not to be wondered at, seeing that factory production was introduced so recently and is growing so rapidly. The conditions show the normal transition from cottage to factory industry, and it is, therefore, unnecessary to enter into detail. It should be mentioned, however, that many industries are exotic and were unknown before Japan was opened up. Beer, bicycles, refined sugar, mineral waters, candles, watches, watch glasses, celluloid, carpets, paints are a few such industries as come at random to the mind.

Under the circumstances, factories starting in Japan have had to take absolutely unskilled labour and train it as best possible. The process is still at work. New factories are springing up all the time and working with raw material. Starting as it were from nothing the rate of expansion has been rapid. Now that Japanese industry has acquired considerable dimensions, possibly the rate will slow down. That will mean that the established industries will become stabilised, the proportion of skilled labour, at present very small, will grow, and the standard of work improve.

Domestic System.—It has been mentioned that the domestic system exists side by side with the factory. Until recent years all manufactured goods in Japan were made on the domestic system. The bulk of goods consumed in the country are still so made, but in view of the objects of this memorandum, I propose to ignore this side of the domestic system and deal only with goods made under it for the foreign market. A certain number of these, *e. g.*, fans, are purely Japanese. The majority have been introduced from abroad.

These cottage industries form subsidiary occupations for farmers and their families. Silk reeling and weaving are the most important of these. The statement that the cottage industries are carried on by farmers' families requires modification. Many of them occupy the families of the poorer classes in the towns. Speaking generally, there are few parts of the country where one or other of these domestic industries does not occupy the spare time of women and children of the lower classes, whose duties or whose years do not permit them to go out to work.

The special cottage industries are silk reeling, cotton weaving, hosiery, and match-box making, buttons, brushes, drawn work, lace making, plaiting of hemp and straw braids, beads, imitation pearls. To give an idea of the system, the organisation of one of these industries, say shell-button making, may be described. The shell goes through the following processes:

(1) Cutting out the buttons.
(2) Drilling holes.
(3) Washing with acid.
(4) Polishing with emery powder.
(5) Finishing on grindstones.
(6) If required, boiling with a dye to colour.

The machinery used is of the simplest description, consisting of lathes and grind-stones operated by the foot. A few of the larger establishments employ some 30 workmen; most only three or four. The large establishments make the entire button; others do only one process, *e. g.*, cutting out the buttons.

The same firms that export buttons usually import the shells. They will have one or more larger works under their control. In addition, there are dealers in shells and buttons. These will give out contracts to the "master workers." The latter will take the shells and give back the buttons begun or completed. Now, the small man working in this way has no capital, little idea of responsibility, and probably is in debt. The importer or dealer is not in a position to investigate the position of any worker, so he employs what is technically known as a *tombi* (lit., a "Kite," and so a middleman). The tombi takes the shells to the worker and receives back the buttons. He may shoulder the responsibility, or that may be taken by his employer. In either case his charges must include not only the time spent but also provision for dishonesty or improvidence on the part of the worker.

The above brief description may be applied mutatis mutandis to other domestic industries. Regarded from the point of view of labour, it will be seen that its apparent cheapness is offset by waste in transport, by want of uniformity in the goods manufactured, by commissions to numerous parties, and by the extra charge needed to cover loss by fraud. The manufactured article being poor can only command a small price, and wages paid at best would be low. As it is, wages already low have to stand the cost of all these additional charges.

Waste of Labour.—Labour is wasted in many ways. There is first the waste incidental to piecemeal work. Raw material is carted to one establishment, where it undergoes one process; it is then carted to another, to be carried one stage farther in manufacture, and so on. Horses and bullocks are used to a limited extent, the former being for the most part ill-fed and brutally ill-used. The carts are primitive and the animals led. Most of the haulage falls to the lot of human beings, who, if at least they have no one to bully and whip them, have yet to haul preposterously heavy loads. Their labour are rendered unnecessarily arduous by bad roads, not to mention absurd bridges built frequently in the form of an arch to obviate grading. In a word, as stated at the outset of this memorandum, the prodigal waste of human labour would, if no other proof were forthcoming, be evidence that labour is plentiful and despised.

Female and Child Labour.—A feature of Japanese industry is the quantity of female and child labour. The spinning and weaving companies employ 100,000 girls, of whom a considerable number are children, as against a quarter that number of men. Similarly in weaving, all kinds, the number of women working in 1912 was stated to be 133,000 in factories and 205,000 in cottages, while the number of men was given at 15,000 and 11,000, respectively. In a few other industries, such as matchmaking and plaiting, women predominate. In such cases, and in the division of labour in other industries where women are employed, the work done by them is, as might be supposed, such as calls for nimble fingers and diligence, while more arduous tasks, as well as duties and work requiring specialised skill, are performed by men. There is therefore little *direct* competition between male and female labour, even where it is employed in fairly equal quantities side by side.

While, as a general rule in factories, the hard manual labour is done by males, in certain country districts the employment of women for this class of work is only limited by the difference in their physical power. Women work at the same jobs as the men in the coal mines in Kyushu, where the labour is said to be 40 per cent female. In out-of-the-way parts they are to be found carrying loads of timber and rice on their backs, and in farming they work side by side with the men in the fields. One reason for this is that field work in Japan calls more for endurance than for physical strength. (Appendix B gives information as to the labour employed in factories in different branches of industry at the end of 1916.)

Few statistics are available as to the labour in "cottage industries." It is to be assumed that the percentage of female and child labour is, from the nature of the case, high. The numbers employed must be far in excess of those working in factories. On the other hand, where the latter devote all their time to the work, much of that done in the homes is done in the intervals of other occupation.

Hours.—The Japanese workman works long hours, ten to twelve on an average, with few holidays, generally two to four days a month. During the war factory employees have been doing overtime in addition. There are no statistics, however, to show the number of days actually worked by each workman. From enquiries which I have made from various sources, it would seem that absences, from illness, or other cause, are frequent, and the question arises whether the system of long hours really means increased output when attendance is irregular. The principal sufferer, however, is the workman, as he is paid by the day. There is no actual proof that his health would be better and he would work more regularly if he were given shorter hours, but it is probable from experience in other countries. It also seems to be suggested by the fact that while he is at work he does not work steadily but has frequent breathing spells. In the case of piecework it is said that output drops con-

spicuously after pay day and comes up with a run as the next day approaches. One reason is, possibly, that he is overworked, another is the habit of living in the immediate present, but it is said that there is also another reason, and that is the workmen are loath to produce more than a certain amount from fear, not altogether unfounded, that if their output increases the employer will put down the rate. The result is that the pieceworker, like the workman paid a fixed amount, works long hours but tends to idle a good deal of the time. In other words, the Japanese have their own form of "ca'canny."

Owing to the unsteadiness of the work, the employer has to keep a bigger plant for a given output than would otherwise be necessary. The result again is a demand on his part for longer hours. That again means lower efficiency and so the vicious circle goes on.

Labour Market.—Casual labour is obtained from so-called human markets. Here irregular workmen gather every day and contractors come and collect as many men as are wanted for particular jobs. They are generally to be found in the vicinity of arsenals, shipbuilding yards, iron works, and similar establishments, and around the docks at the ports where the demand for labour constantly varies. The people offering themselves at these human markets appear to be of two classes—the main body of casual workers who have drifted into irregular employment and are fit for nothing else, and the country labour attracted in times of industrial activity which, from ignorance of conditions, knows no other means of selling its services. In Osaka during 1916, the number of casual workers congregating at these marts daily was estimated at 800. At present (1919), the number has dropped to 500. It is suggested that the balance have gone back to the country. The condition of most of these men is miserable: their clothes are ragged, when it rains they have no shelter, they herd within railed-off enclosures. The Osaka Municipality now proposes to build rough shelters where water can be boiled for tea making and to establish labour exchanges at these markets. I have no clear information on the subject with regard to other centres but conditions appear similar.

It was feared that the closing down of many factories since the Armistice would cause considerable unemployment. So far these fears have not been realised. As noted later, there was a time in 1918 when labour became inadequate and workmen discharged from one industry have found employment elsewhere.

Wages.—In the absence of detailed investigation, which has yet to be made, remarks as to wages must be of a general nature. The pay received in various industries has increased steadily year by year; during the war it nearly doubled. If this rise was due to increased efficiency and represented greater purchasing capacity, the worker would be very well off indeed. Unfortunately prices have risen, too, as the salaried worker finds to his cost. In fact there is little doubt that in Japan prices have risen first and wages after. The workman appears to be engaged in a constant struggle to catch up with the cost of living, his only respite, and that a doubtful blessing, when prices begin to sag.

Food.—The Japanese lower classes live almost entirely on rice, seasoned with dried fish and a little fresh and pickled vegetables. Fresh fish and meat are for the most part beyond their means. Where they cannot afford rice alone, they consume a mixture of rice and millet or of wheat and millet. The quantity of rice varies greatly according to work. In arduous labour, such as coal heaving, one person may consume as much as 1 sho (about one-fifth peck), which is twice the quantity consumed by a person engaged in a sedentary occupation. On an average a workman requires about 0.7 sho of rice per day. In 1916 a sho cost him 18 sen (say 4½*d.*); in March, 1919, the same quantity cost 45 sen (say 11½*d.*). In the industrial centres the same is true with regard to rents. A house of two rooms in 1914 cost Yen 3 to 4 (6 to 8*s.*) per month; in 1919 it cost Yen 6 to 10 (12 to 20*s.*). Clothing and sundries have gone up similarly.

Taxes.—One way in which the lower classes are heavily penalised is in the so-called "bad taxes." These are the taxes on *sake*, soy, textile consumption, sugar consumption, drugs, transit, petroleum, the salt monopoly, and the import duty on rice (for the moment suspended). These taxes bear disproportionately heavily on the poor classes and form an important item in any consideration of wages.

Cost of living.—An enquiry was made in 1912 by the Department of Agriculture, Commerce, and Industry as to the cost of living. It is given in Appendix C. From this it appears that among 1,627 families interviewed, the principal bread-winner in the case of 106 was getting 50 sen (1*s.*) per day or less, in the case of 1,186 between 50 sen (1*s.*) and 90 sen (1*s.* 10*d.*) and only in the case of 335 was he getting more. Adding the receipts from the labours of the rest of the family, we find that 106 families were receiving under 21 yen (42*s.*) per month and 1,186 more under 27 yen (54*s.*) and only 335 families were getting more.

A publicist commenting on these figures said that a family of four persons would require at that time to spend 11½ yen on food (half of which expenditure would be for rice), 2 yen on clothes, nearly 5 yen on housing. This leaves only 2½ yen (5*s.*) for sundries in the first class and 8½ yen (17*s.*) in the second. It would be unwise to draw any detailed conclusions from these figures. The investigation was not sufficiently widespread and the workmen concerned were comparatively favourably situated; but one or two points are worth notice.

The high percentage spent on lodging should be noted. The population of the big towns is growing far more rapidly than the housing accommodation, with the result that the working classes are heavily mulcted for rent. The small amount spent on clothing is misleading. Japanese of the poorer classes make all their own clothes. Of course there is no great variety. An examination of the figures shows that the earnings of the principal bread-winner are based on 26 days per month. The hours worked are not stated but were probably about 10. Working long hours for 26 days per month, the average workman under review was, with the help of the work done by the members of the family, able to make ends meet. But in practice the average workman does not work thus steadily. He falls ill or he is absent from his own fault. It will be seen then that on the basis of the official figures, the workmen were poorly paid. Their lot, however, was far better than that of workmen in less well organised industries, where the factories are small, wages poorer, and employment precarious.

These figures were quoted not because they are necessarily representative; rather they appear to depict the position of the worker under the most favorable conditions. It would be unsafe to draw any conclusions as to the general well being of the working classes therefrom, but there can be no unfairness in taking the evidence they disclose as to the opposite side of the account. In Appendix D I give an actual budget of a family with which I am acquainted. The remarkable expenditure on rice, nearly 50 per cent, will be noted. The important bearing on the wages problem of the price of rice may be inferred.

Why wages are low.—Many causes conspire to keep down wages. Labour is plentiful and inefficient. These two reasons prevent labour from getting more than a bare living wage. It is at this point that the competition of female and child labour and of the cottage industries is felt. In the poorest families the wife also goes out to work (it should be stated that the Japanese marry young and few remain unmarried); the children are left under the care of the eldest of their number and "bring themselves up." If possible the wife remains at home, and in the intervals of household duties does cottage work. The children also when not at school will be occupied in the same way. It is a common sight in country villages to see them "playing" in the streets, mechanically plaiting as they run about. The members of the family are occupied in their spare time from early morning to late at night in this way. If we deduct from the amount necessary to keep the family going, the income derived from taking in work of this description, we get the least amount for which the head of the family will work. Labour being plentiful, the employer can get it at this price.

Cottage work is, as might be imagined, wretchedly paid. It is not the main means of subsistence and the only question is what is the least amount it is worth the while of the weaker members of a family to work for. In brush-making as little as 3 rin (say three-fortieths of a penny) may be paid for drawing the poorest kind of tooth brush, and 1 sen (one farthing) is an average price. In making the glass beads the colouring is done at a rate ranging from 1 sen (one farthing) to 10 sen (2½*d.*) per 100 according to size. In certain industries, as for instance glass beads mentioned above, quality is of little importance and cheapness everything. This work will be placed out to poor districts where the cost of living is low. Where quality is of some importance the work will tend to be placed out in richer districts and a higher rate will have to be paid. In either case the same principle works; it is not at the moment the value of the work done but the lowest points at which the worker will take it that decides the wages paid. This accounts for the fact that goods, over the manufacture of which the most wasteful methods have been employed, can still be turned out "dirt cheap."

A great number of Japanese goods are being manufactured on both the factory and the domestic system. The competition of the latter keeps prices down and acts as a drag on wages paid by factories. Labour, therefore, has to contend not only with a limited demand for its services but also with conditions under which industry is at present organised.

In discussing the value of the wages paid, the conditions in 1912 were taken as a basis. Striking changes occurred during the war. During 1916 industry developed at such a pace that for once the supply of labour was temporarily quite inadequate. Pay then increased rapidly, though as far as possible increases were given in the form of bonuses or of cheap rice, that staple having doubled in price in the course of a few months. This rise in the price of rice was, it need hardly be said, a contributing

cause of the rise in wages, but the momentary shortage of labour was at first the main factor. The conditions of 1916 were so abnormal that it is perhaps unwise to draw general conclusions therefrom, but the course of events seemed to prove that in "normal" times it is the over-supply of labour which causes poor wages and low efficiency, and not a radical inferiority that can not be surmounted. As stated, the rise in wages was offset by the extraordinary rise in the cost of living, food and rent more than doubling.

A few words may be added with regard to textile manufacture.

Cotton Spinning.—The bulk of the operatives in spinning mills are girls. They are recruited from the children of tenant farmers and work for short periods of one, two, or three years; the average is said to be one year. The mills send round from time to time in country districts to collect new hands. They advance the railway fare, and, if required, make a small advance to the parents. Should the girl fulfill her contract then the railway fare is refunded. These girls are from 16 to 22 in age. They work long enough to buy an outfit of clothes and then return home to get married. The machinery is kept going day and night, and the girls work in two shifts. They work, therefore, from 10 to 12 hours; after about a week of day work they are turned over to night work, and vice-versa. For this they obtain wages varying from 25 sen (6*d.*) in the case of beginners to 80 sen. (1*s.* 8*d.*), but the mills provide them with their meals at what was formerly cost price but is now considerably below cost. They sleep in dormitories erected by the mills on the premises. Formerly the conditions in these dormitories was extremely bad, the night shift sleeping under the futon (bed clothes) vacated by the day shift but now they are much improved. The leading mills have also introduced many improvements calculated to make the life of the workers more healthy and happy; hospitals, playgrounds, shops at which cheap luxuries are provided at cost prices, recreation halls, &c.

On the other hand the opponents of the system say that the long hours and the night work sap the vitality of the girls. The mills admit that when they come to physical maturity, say 20 to 22, their work rapidly deteriorates, and it is suggested that this fact alone may be taken as an indictment of the system. Meanwhile it is pointed out that the companies have for the last two years been paying dividends of 50 per cent and higher. It is no part of the purpose of this report to discuss the ethics of the system, but as an ethically wrong system is in the long run likely to be uneconomical also, it becomes necessary to touch upon the point in passing.

As a result of the constantly changing labour in cotton spinning mills, the standard of efficiency is low. It is said that on an average two girls in Japan do the work of one in England, and even then there is greater waste and poorer output. The girls are put in charge of a machine before they are in any way competent, and before they have time to acquire practical skill, in most cases, they leave the mill. It might be thought that as the Japanese have been used to weaving with hand looms and are naturally deft with the fingers, they would bring a natural aptitude to the task, but as the girls will not come to work in a mill from a district where weaving is a local industry, even though local wages are poorer. the mills have to obtain their labour from other poorer districts, where the girls have no natural aptitude.

As the girls leave the mills and return home the moment they have saved a fair amount either in cash or in clothes, it is said by the mills that to raise their wages is only to induce them to return earlier than ever. An impression might be given that they are well paid. The truth is, however, that the conditions are so arduous that in most cases the girls will not remain a minute longer than they can help.

To sum up, the working of Japanese cotton spinning mills is based on a theory of maximum output. As at present organised, the efficiency per unit of labour employed cannot but be very small. The only resource is to get the utmost out of the machinery. Fortunately or unfortunately, labour is very cheap, so it can be prodigally used. If the dividends paid by the spinning mills are taken as a criterion, the system is a very successful one.

The position with regard to silk is very similar though the industry has not been so thoroughly organised on factory lines. Wages also were paid yearly in advance to the parents in many cases. Monthly pay is now to be introduced.

Housing.—Japan has her housing problem, though perhaps not so acute as in the West. It is stated that the population of Tokyo has been growing of late years, no doubt owing to the development of industry, at the rate of 100,000 a year, while housing accommodation grows only at the rate of 30,000. In Osaka the growth has apparently been less, but building has been almost at a standstill owing to the cost of material and labour. The result is that workmen have to pay rents out of all proportion to their income. They may, however, go into lodgings. Of these there are two classes—the *geshukuya* or lodging house and the *kichin-yado* or doss-house. At the former they may be charged 15 to 24 yen per month (say 30*s.* to 48*s.*) according to the amount of rice

they eat, and the surroundings are respectable. With regard to the doss-houses I propose to give some details from a report of the Osaka Municipaility on conditions in the neighbourhood of Osaka. Conditions in Tokyo and other big centres may then be inferred.

Doss-house.—Doss-houses are not allowed within the city of Osaka. They therefore cluster round the outskirts. In April, 1918, there were 80 of them. Detailed investigation showed that 47 were accommodating 3,527 persons, mainly "coolies." These were earning on the average 70 or 80 sen (say 1*s.* 6*d.* to 1*s.* 8*d.*) per day. They paid charges to the doss-house keeper of 5 sen for lodging, 4½ sen for bedding, ½ sen for light, 10 sen in all. For this three persons could get a room of two mats (say 36 square feet). Food and cooking the lodgers attended to themselves. According to the report the people concerned are composed of the riffraff of the country. They have no idea of hygiene. When they have money they eat and drink to excess and if it rains for two succeeding days and they can not get work, they are on the verge of starvation and are turned out into the street, though a charitable doss-house proprietor may lend them a mat to camp on there.

The number of people living this life doubled in four years of the war, and though at present the total figures are not great, the rapidity of growth has roused the concern of the municipal authorities, who recognise the disastrous effect on the moral character of the people drifting into such surroundings and the children growing up in them. As the lack of houses is a contributing cause to the growth of these dossing places, the erection of houses is recognised as a prime necessity.

Slums.—The problem of the slums in the principal cities is also engaging attention. The question is one for an expert, and no very reliable data are available at present. It appears clear, however, that the slums in Tokyo, Osaka, Kobe, Nagoya, Moji, and elsewhere are growing. The conditions are said to be sufficiently dreadful. In places there is but one privy to ten houses, cleaned out two or three times a month. (Some of the houses have no flooring but the bare earth and are quite unventilated.) The inhabitants are in the main engaged in degrading occupations—rag picking, the removal of night soil, begging, stealing, and thieving. They live like the inn servant in David Copperfield on "broken vittles," damaged and condemned food. The number of houses in the slums of Osaka is admitted to be 556 and the population 3,000, but the true figures are probably higher. A municipal report of 1911 showed that 1,100 houses were then letting at a monthly rental of one and half yen (3*s.*) and housed about 4,000 persons. Police figures, however, gave the number of houses at 2,225, with 7,700 persons. The slum population of Tokyo is given at 20,000.

These are dwellings of the poorest of the poor. Conditions of the better class poor are of course much improved, but leave much to be desired. On the whole, however, the evil appears to be palliated by the Japanese family system, by which the destitute have a call, which is rarely denied, on the more well-to-do members of the family, so that it is only the waifs and strays and the *eta* (former outcast class) that find their way into the very poorest quarters. On the other hand, it is not quite certain that the family system will stand the strain of industrialism, and there are signs that with the growth of her industry attendant problems are growing that demand attention.

Factory law.—The rights of the workman received little attention till 1916, when an attempt was made to protect his interests in the Factory Law. As far as it goes, this act appears to be very beneficial, but its practical value is seriously diminished at present by numerous exceptions. It does not apply to factories employing less than 15 persons unless the work is dangerous or unhealthy, nor to works not employing motive power or engaged in work of a simple description. Normal working hours are fixed at 12, but this limitation need not be adhered to in the case of factories employing only male operatives over 15 years of age. Further, an extension to 14 hours is allowed to filatures or factories turning out silk goods until 1931. No person under 15 and no female is to be employed on night work (between 10 p. m. and 4 a. m.), but this prohibition is not to apply till 1933 in case the night work is divided into two shifts, and cotton spinning mills are exempted till 1931. While these exemptions are in force employees must be allowed two to four holidays per month. Certain restrictions apply to the employment of women in maternity. Workers who are injured, except by flagrant neglect, are entitled to relief in the form of half wages for three months and one-third after. Disabled workmen are entitled, in addition, on recovery, to compensation varying from 30 to 170 days' wages. In case of death, employers must pay 170 days' wages and at least ten yen (£1) to funeral expenses.

It will be seen that the act is very modest in its scope. An examination of its provisions discloses more eloquently than the most laboured argument the hardships of the Japanese worker. No doubt the act will be amended as time goes on, but vested interests are so strong that progress is likely to be slow. There is always the initial difficulty attendant on the introduction of amendments of this description

by legislation. Piece-workers at once object to restriction of their hours of work if it means temporarily that their earnings may decrease. The small factory owner with little capital is little concerned in the future efficiency of labour if he has to pay the immediate price in the failure of his works. It seems, therefore, that real progress can only go hand in hand with the consolidation of industry and the growth of the up-to-date factory on modern lines.

Labour Unions.—Trade unions are at the moment nonexistent and under the present law would have little power if formed. They are not illegal, but there exists a clause in the Law of Public Security making it illegal to instigate a strike. Liberally interpreted, this does not hinder workmen from striking and, in fact, they do strike, but it hampers organised action. Moreover, there is a well-grounded suspicion that the authorities have hitherto passively obstructed the formation of trade unions. An application in 1914 was rejected on the ground that the promoters were men devoid of means, education, and credit, and hence disqualified to form a trade union.

It is said that the Japanese workman has not the general ability to form trade unions, that he does not particularly want them, and that he would not know what to do with them if he had them; that he would be the prey of unscrupulous agitators. To encourage trade unions would be like putting lethal weapons into the hands of babes and infants.

At this stage a certain section of capital has put forward the principle of kindly treatment (onjo-shugi). The employer is to regard the employee as a dependant whom it is his interest, as well as his duty, to treat kindly. The employee's welfare is to be ever present in the mind of his employer and is to outweigh other considerations—always provided the business does not suffer. In the resulting cordial relations between capital and labour the need for labour unions disappears. To all this the opponents of the theory say that, as it is based on the good will of the employer and has no legal sanction, it is very beautiful in principle but impossible of practice.

The cause of labour is championed by an organisation known as the Yuaikai (Friendly Society). This was formed in 1912 by a Mr. Bunji Suzuki, graduate of law of the Tokyo University, who is at present attending the Labour Conference in Europe. The society is hampered by a want of funds, as its membership is small and it has to rely on a ten sen (2½*d.*) subscription collected monthly from members, from which has to be deducted the printing expenses of its magazine ("Labour and Industry"). Its objects are to organise labour and obtain an amelioration of its working conditions by the education and assistance, monetary and otherwise, of the workmen and to mediate in labour disputes.

Originally formed as a buffer between capital and labour, the Friendly Society has recently come out simply and solely as the representative of labour. Another organization has been formed, known as the Rodo Kyokai (Labour Association), which claims that it will be identified exclusively with neither side, but will act as the impartial advocate of either as necessity arises.

Such was the position at the end of 1918. The early months of 1919 have witnessed a sudden burst of public interest in the subject of labour. It is hardly possible to take up a newspaper or periodical without finding some discussion of the disabilities of labour, the cost of living, the need of labour unions and, ranging further afield, the question of universal suffrage and the meaning, advantages and disadvantages of democracy. A measure has been introduced into the Diet by the Government reducing the suffrage tax qualification from ten yen (£1) per year to two or three yen (4*s.* or 6*s.*) per year. At present, critics contend that only some 2 per cent of the population have the suffrage.

At the same time questions have been asked in the Diet as to the Government policy towards trade unions and a small section of politicians have fathered the cause of labour. Their plan of action would appear to be threefold: (1) having obtained Government approval, to make a small beginning by the formation of trade unions within the larger factories as an object lesson to the workmen and the management of smaller factories; (2) to form a Labour Society to study the experience of other countries, translate literature, and investigate actual conditions; (3) to assist the mobility of labour by the formation of labour exchanges in important centres.

Primitive guilds.—Though there are, as said, no unions or associations of Japanese workmen, irregular groups exist of unskilled workmen under *oyakata* or "bosses." Ordinary workmen are divided into *dokata*, or coolies, the "hewers and drawers of wood," and *tetsudai*, the helper or doer of odd jobs, one grade higher than the dokata.

These unskilled workmen are frequently grouped round an oyakata as stated, the local boss or chief. He acts as a tie between the employer seeking labour and the workmen seeking employment. He frequently acts as foreman and is to a certain extent responsible for the work done. In this way he is useful to both parties.

From his position the oyakata is able to exercise considerable influence among the workmen to whom he can grant or refuse employment. The position carries responsibilities with it, and he is expected to assist those who are in trouble whether by feeding them when ill or finding occupation for them when unemployed. Any member of his gang has a claim on him. In many cases bosses in different parts of the country are in touch with each other and can send labour from one district to another.

These groups exist among miners, and it is said that a miner who is in distress through no particular fault of his own can always find assistance in one form or another from the head oyakata of his district. An undeserving case, on the other hand, is likely to be found out very soon and to have rough justice meted out to him. This brings us to another aspect of the system. The social duties so far outlined as being carried out by the oyakata are admirable in theory and in an unorganized state of industry they fulfil a very useful purpose, but the merits of the system are discounted by serious shortcomings.

There is a tendency for the irresponsible, reckless, and lawless man to join such a group. In return for the protection he acquires, he has to sink his own personality and embrace the quarrels of his boss, righteous or otherwise. As the boss is known as the oyakata or oyabun, both meaning parent, so he is the *kobun*, or child. When his chief makes a call on him he has not to argue, but to act.

The quarrels that arise are generally over spheres of influence. A gang will acquire, or claim that it has acquired, the prescriptive right to all contracts within a certain vaguely marked territory. Unfortunately, there is rarely agreement as to its limits. One group A will consider that another B is encroaching on its preserves, and then A's chief will call on his "children" to fight for their rights. Unless the police intervene in time there will then be bloodshed. As a rule, however, the police hesitate to interfere while there is possibility of compromise, and frequently the matter is settled by the payment of "compensation."

This liability to take up the "parent's" quarrel, right or wrong, is a heavy one, and peace-loving workmen are likely to fight shy of throwing in their fortunes with local chiefs. It is the gambler and waster that is attracted, and the system tends to fall into discredit. The employer of labour, too, finds the existence of these groups somewhat of a mixed blessing. He may not wish to submit to the monopoly of such a group and may wish to bring in labour from outside. The boss whose sphere is being infringed has then to be "squared." In fact, on a big piece of work the amount of blackmail that has to be paid may be a by no means negligible item in costs. Both the employer, therefore, and the steady workman are interested in the removal of the abuses at least of the parent-child system, and as a "farmer" of labour the oyakata is being replaced by the labour exchange, public or private. The term oyakata is now also used generally of a foreman, and it is probable that the more autocratic powers will entirely disappear with time.

In passing, it is to be noted in the first place that there is nothing approaching democratic government within the group. The gang has to obey its chief and though a chief who did not act up to the code such as it exists would soon find his band melting, yet he is despotic within his little kingdom. It follows that the outlook of the group is of the narrowest. It is more concerned in defending its fancied rights from outside encroachment than in furthering the cause of labour generally, and as a means of bettering conditions it is too isolated to effect anything, even if the conception of such an aim occurred to it.

PART III.—CONCLUSIONS.

A parallel might be drawn between conditions in Japan at the present day and those in England at the beginning of the nineteenth century. In both cases we see the factory system taking the place of the domestic system, and the attendant evils which are now coming into prominence in Japan are similar to those which were experienced in England. "He (the labourer) had to sell his labour in a market in which the forces of supply and demand would have given him a poor pittance even if they had worked freely. But he had not the full advantage of economic freedom; he had no efficient union with his fellows; he had neither the knowledge of the market nor the power of holding out for a reserve price which the seller of commodities has, and he was urged on to work and to let his family work during long hours and under unhealthy conditions. This reacted on the efficiency of the working population, and therefore on the net value of their work, and therefore it kept down their wages." Such was the position of the workman in England according to Marshall (Principles of Economics p. 749). The quotation may be applied word for word to the conditions in Japan at the present day.

I have tried to show that there is good reason for inferring that the faults of Japanese labour are in many cases attributable to the conditions under which the employee works and lives. They may be reduced to want of skill (due to lack of training, itself due to the unsteadiness of labour), to absence of interest in the work done (due to absence of incentive), to want of concentration (due to long hours), and so forth. It is not contended that the causes given in brackets are alone responsible, but that they at all events contribute, and in a word that labour has not at present a fair chance.

It does not follow that it only requires the raising of wages or greater economic freedom to act as the Open Sesame to contentment and efficiency. The conditions are so complex that changes must come slowly. Nor would it be safe to conclude from the parallel just drawn that they will closely follow the trend of events in England in the last century. The Japanese character is different from the English and what is one man's meat is another man's poison. But it does seem that the realisation that the lot of the working classes in Japan needs to be bettered, if it leads to a removal of the disabilities under which they are suffering, will be the means of raising their standard of life and ultimately their standard of efficiency.

On rereading what I have written in this memorandum I am struck with a fear that I have overemphasized the dark side of the picture. It is well to say, therefore, that the number of factories modeled on western lines is yearly increasing. The treatment of the workman in these appears to reach a comparatively high level. They have found, as far as I can gather, that care of the workman pays.

Such factories can not but have a high influence both as an object lesson to other works, and also as teaching the workman what he has a right to expect. It appears certain therefore that the reorganization of industry which is now proceeding and the greater powers that follow its development will react favorably on the efficiency of Japanese labor.

OSWALD WHITE,
H. B. M. Vice-Consul.

APPENDIX A.—POPULATION.

Statistics of population are confessedly incomplete.

There are two sets of figures to choose from—those based on return of permanent domiciles and those based on residence. Taking the former as more likely to approximate to reality, we get—

1898	43,764,000
1903	46,733,000
1908	49,589,000
1913	53,363,000

These returns show that the population is increasing steadily, and is probably now in the neighborhood of 57,000,000.

The two sexes are about equally represented, the 1913 figures being 26,965,000 males and 26,398,000 females.

As regards occupation, there are no statistics. In 10 years ending 1912 the number of farmers' families increased from 5,359,000 to 5,438,000, and the total number of families from 8,364,000 to 9,430,000. Families other than farming thus increased from 3,005,000 to 3,992,000. This would seem to show that the farming class forms about 60 per cent of the population (one authority gives 65 per cent), but that it is not growing as fast as other classes. This is what might be expected. The supply of land is limited, and though the growth of population is likely to cause more intensive culture and to bring into cultivation land not previously profitable, the country can only absorb a portion of the growth of farmers' families, the surplus overflowing into other occupations or emigrating.

Forty per cent of a population of 57,000,000 would be about 23,000,000 to be apportioned among officialdom, commerce, industry, fisheries, mining, and forestry. The bulk of these, say 20,000,000, may be taken as constituting the classes the members of which live directly or indirectly by commerce and industry. The population living in towns of 10,000 inhabitants and over at the end of 1913 aggregated 13,756,000; of 20,000 and over 9,259,000; of 50,000 and over 6,325,000. Further than this it would be idle to go.

Appendix B.—Labor in Factories.

The following table gives information as to the labor employed in factories in different industries at the end of 1916.

Occupation.	Operatives.								Laborers.	
	Over 15.		Over 12, under 15.		Under 12.		Total.			
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Textile	92,386	460,735	4,557	77,288	177	4,395	97,020	542,418	12,090	5,582
Machine and tool	135,049	9,340	4,166	842	72	8	139,287	10,190	10,741	1,027
Chemical	80,177	33,513	5,550	4,867	320	358	86,047	39,233	9,736	2,313
Food and drink	45,107	8,371	746	532	16	17	45,869	8,910	4,378	2,749
Miscellaneous	64,024	29,448	4,461	4,154	114	298	18,599	33,900	7,360	1,059
Electrical	3,111	9	.....	.....	.....	.....	3,111	9	210	18
Gas	1,559	61	5	.....	.....	.....	1,564	61	195	22
Metal refineries	16,552	1,912	79	26	4	10	16,635	1,948	4,013	746
Grand total	437,865	543,389	19,564	87,709	1,203	5,571	458,632	636,669	48,723	13,516
Approximate percentage	40	50	2	8	(0)		40	60	78	22

At the risk of tiresome reiteration, it is necessary to caution against placing too much reliance on these statistics, but so far as the figures go, they seem to show that of the workpeople employed in factories 10 per cent are children under 15 (14 according to Western reckoning) and 0.6 per cent are under 12 (11 according to Western reckoning); 58 per cent are females. Of the labourers 78 per cent are men and 22 women.

The following are figures for factories run by Government offices (1916):

		Per cent.
Over 14:		
Male	125,887	...
Female	31,963	...
Under 14:		
Male	20	...
Female	293	...
Total:		
Male	125,907	80
Female	32,166	20
Labourers:		
Male	4,634	82
Female	1,038	18

Here child labour under 14 is negligible. In similar figures for 1912 it amounted to rather more than 2 per cent.

Few statistics are available as to the labour in "cottage industries." It is to be assumed that the percentage of female and child labour is, from the nature of the case, high. The numbers employed must be far in excess of those working in factories. On the other hand, where the factory employee devotes all his time to the work, much of the work done in the homes is done in the intervals of other occupation.

APPENDIX C.—ENQUIRY INTO THE COST OF LIVING BY DEPARTMENT OF AGRICULTURE, COMMERCE AND INDUSTRY IN 1912.

The enquiry was conducted among the workmen in factories manufacturing machinery, the pay in which is comparatively high.

	Daily wage (sen).		Total.	Daily wage (sen).				Total.
	40	50		60	70	80	90	
Number of families	1	105	106	176	259	364	387	1,186
Average number of persons in family	2	3.5	.....	3.4	3.7	4.8	3.9	.....
Total number of persons	.....	369.5	.....	598.4	958.3	1,747.2	1,509.3	4,813.2
Average monthly receipts of head of family (yen)	11.40	13.06	.....	15.56	18.18	21.10	23.94	.....
Average monthly receipts of family (yen)	4.50	7.59	.....	6.04	5.98	3.36	2.79	.....
Average monthly receipts of family (yen)	15.90	20.66	.....	21.60	24.16	24.46	26.73	.....
Total receipts monthly of families interviewed (yen)	15.90	2,169.30	2,185.20	3,801.60	6,257.40	9,604.60	10,344.51	30,007.51

	Daily wage (yen).						Total.	Grand total.
	1.00	1.10	1.20	1.30	1.40	1.50		
Number of families	162	99	45	25	3	1	335	1,627
Average number of persons in family	4.3	4.6	4.7	5.5	4.8	4.0	.....	.....
Total number of persons	696.6	455.4	301.5	137.5	14.4	4.0	1,609.4	.....
Average monthly receipts of head of family (yen)	26.58	31.14	35.86	35.09	36.50	43.20	.....	.....
Average monthly receipts of family (yen)	2.89	3.51	2.91	6.22	.....	6.800	.....	.....
Average monthly receipts of family (yen)	29.47	34.66	38.77	41.31	36.50	50.00	.....	.....
Total receipts monthly of families interviewed (yen)	4,715.26	3,431.34	1,744.65	1,032.75	109.50	50.00	11,083.44	43,276.15

1 yen=100 sen=roughly 2s. 0½d. (1912.)

APPENDIX D.—COST OF LIVING—AN ACTUAL BUDGET.

X is employed as an outdoor servant in a Government office. He is 48 years of age, and was in his younger days a ship's carpenter. He is married and has five children, four male aged 21, 19, 11, 9, and one female aged 22.

	Family monthly Income (yen).
Father	17
Eldest son	30
Second son	15
Daughter	20
Total	82

Expenditures (monthly) (averaged over the twelve months):	Yen.	Per cent.
Rice	40	48.7
Salt and soy	3	3.6
Other food	9	11.0
Sake and tobacco	7	8.5
Fuel	4½	5.5
School fees	3	3.6
Clothes	5	6.0
Rent	5	6.0
	76	93.0
Balance for sundries	6	7.0
Total	82	100.0

The expenditure on *sake* and tobacco is relatively high, while that on "other food" appears inadequate. If we include *sake* and tobacco in food we get a total expenditure for food on 71.8 per cent. Rent is low.

N. B.—As a single instance, the above budget is not, of course, sufficient to be made the basis of argument. It is merely given as being a typical case.

Appendix E.—Labour in Mines.

The principal mines are: Gold, silver, copper, lead, and zinc, generally in combination of two or more; and iron, coal, and petroleum.

The output of 1916 was approximately:

Gold	ounces troy..	254,000
Silver	do....	5,809,000
Copper	tons..	100,000
Lead	do....	11,000
Zinc	do....	38,000
Pig iron	metric tons..	81,000
Coal	do....	22,902,000
Petroleum (crude)	gallons..	100,000,000

1916 was, however, an exceptional year as regards the output of copper and zinc. The output of copper in 1912 was 61,000 tons and of zinc *ore* about 32,000 tons.

Miners employed were in 1916:

Metal	139,175
Nonmetal	15,430
Coal	197,907
Total	352,512

Putting these figures together, we get an output of coal per person employed of 116 metric tons.

The shifts worked were:

Metal	36,081,301
Nonmetal	4,030,517
Coal	47,338,338

As regards accidents, 623 were killed, or 1.77 per thousand; 2,135 were severely wounded, or 6.05 per thousand; and 147,051 were slightly wounded, or 417 per thousand. Slight wounds are those requiring three or more days' treatment; serious wounds are those requiring 30 days or more treatment. This, at least, is the rough basis of calculation. No doubt the mine doctor uses his discretion as to the exact classification of each case. The majority of the deaths and severe wounds were caused by the falling in of roofs and sides.

Appendix F.—Representative Opinions.

A few representative opinions as to the efficiency of Japanese labour which I have obtained from experts who are in a position to judge may be of interest. The first is from a mining engineer in charge of a gold mine. It is necessary to state, by way of preface, that the conditions in gold mines are better than those in copper mines, which again compare favourably with coal mines. In the latter, the treatment of the men by the smaller mines leaves much to be desired. Apart from the long shifts, care for the safety of the miners is very small. On the other side it is only fair to state that the miner himself is singularly callous to danger. This in itself, however, is partly an indication that he is working under bad conditions. (In Appendix E some details as to the labour in mines are given.)

The opinion is, in part, as follows—

"I find him exceptionally cheerful and willing, and, considering his rate of pay, fairly efficient.

"He appears to be more honest than the average run of workers; that is, he does not pilfer every little thing he finds lying about.

"His physical strength and lifting powers are less than Westerners, but he seems to have at least the same powers of endurance on lighter work.

"As a rule he is willing to learn new methods, and quickly picks them up if he is shown exactly what to do.

"Owing to his lack of originality and ideas, the slightest change in the routine throws him out of gear, and, as a rational idea never seems to suggest itself to him,

he will do the most extraordinary things if left to himself; therefore, plenty of supervision by experienced men is needed.

"He is regular at his work and temperate in his habits. Also he saves his money; most of the men here have accounts in the Post Office Saving Bank.

"They love to work in large parties, when they pass more time playing and singing than working. I find that two men working together give the most satisfaction, but, of course, there are times when a large gang is necessary to do a job.

"To sum up, I find him on routine work as good and efficient as most other workmen, but, on construction, where the nature of the work is constantly varying, below the average."

The mechanic.—Another gentleman with a good experience of machine tools, their use and manufacture, giving his opinion of the efficiency of the Japanese mechanic, states that he regards him as inferior to the average British mechanic. He continues:

"In the first place, he does not stick at his work as well as Europeans, and has frequent periods of 'rest' during the day. There is also the usual periodical visits to 'his native country,' or absence owing to sickness or death of his numerous relatives, and I think it is safe to assume that 25 per cent of his working value, as regards time, is lost owing to these causes.

"When he is at work he seems to take a fair amount of interest in his occupation, but, generally speaking, requires a great amount of watching, as he has very little initiative, and if anything goes wrong is dependent upon superior labour to put him right again. For this reason it is noticeable that there are a larger number of 'charge hands' or foremen connected with Japanese works than are usually employed elsewhere. He also has a very poor idea of accuracy, and experiences great difficulty in working to such fine limits as are recognized elsewhere.

"Since the commencement of the European war there has been a big demand for mechanics in Japan, and various classes of labourers have been taken into the works and trained up as mechanics. These represent possibly the poorest class of mechanics, as the opportunities for obtaining engineering knowledge are very limited. Amongst the better class of works, however, the labour seems to be of a higher class, as the employers try to keep their experienced hands as long as possible, and pay bonuses regularly to attain this object. These experienced men seem to compare very favourably with European labour, and the quality of their work is in every way satisfactory, though their product for a given number of working hours does not equal that of British mechanics.

"They do not appear to have the same amount of stamina.

"One thing which is very much in his favour is his adaptability. He is keen on finding out how to operate new machines, and is always ready to welcome up-to-date methods or machines. If he is put in charge of a new machine which will produce twice the amount of work as his previous one, he is quite pleased with the result. Unfortunately, such new machines are rarely kept up to their average working capacity, and gradually the output becomes less and less, until they become little better than the older types.

"Many of the mechanics in the smaller works will spend hours polishing up bright parts of work, or machines, and will ignore entirely the question of accuracy, which, as is well known, is of greater importance than mere appearance.

"Japanese workmen do not pay so much attention to the care of their machines as they ought to do; there does not appear to be any regular rule about cleaning them down periodically, as in Great Britain, consequently deterioration is very rapid. Moreover, they are inclined to be careless in the handling of their machines, and it is a common sight to see handles broken off, screws and nuts missing, sliding surfaces badly scratched, and the general appearance of the machines 'sloppy' and neglected."

An expert on one of the finishing processes in cotton textiles, who was training higher class workmen, expressed to me an opinion to the following effect: He found the men whom he was training too eager to rush at a job. When learning a new method of running a machine, they did not wait for details, but just jumped at the general idea without trying to reason the why and the wherefore of the work to be done. He gathered the impression that the general idea was to take the manual labour as easy as possible. They seemed to be a tendency to take notes too much, with the result that their brains never developed the subject. They were apt to be careless, so it was difficult to keep to a standard. The number of men per machine and the number of overseers was high. Women seemed to be more conscientious and more painstaking.

On the other hand, it should be added that the process in question was more or less new to Japan.

Annex A.—Textile Labour.

Now, that the problem of the improvement of labour condition is being so heatedly discussed, the class of capitalists who are the target of most severe criticism are the 50 or so cotton-spinning companies which employ about 130,000 operatives and are making enormous profits, while the wages they pay to their employees are comparatively small. Now, according to the monthly report for May published by the Japan Spinners' Association, the average daily wages of the workpeople in the employ of 43 cotton-spinning companies during April were 81 sen for men and 58 sen for females; even the highest wages were no more than 97 sen in the case of men and 82 sen in the case of women, while the lowest were 70 sen for men and 41 sen for women.

In view of the fact that those women who are engaged in weaving cotton flannel as home work during hours they can spare from cooking and other ordinary household work can make from Y1 to 1.50 per diem, the wages of spinning operatives are exceedingly small. But operatives are of many kinds; some of them daily attend the factories, bringing their food with them, while others are fed by their employers; and some live at the factory dormitories at the expense of their employers, and so on. In order to consider the question of wages, therefore, it is necessary to enter into some detail. The following figures show the changes in average wages in each half-yearly term since 1914:

Year.	Males.	Females.	Year.	Males.	Females.
	Sen.	*Sen.*		*Sen.*	*Sen.*
1914—First half	48	31	1917—First half	51	35
Second half	48	32	Second half	57	39
1915—First half	39	32	1918—First half	62	43
Second half	48	31	Second half	79	51
1916—First half	49	33	1919—January-April	80	57
Second half	50	38			

(Wages subsequent to April last are not yet published by the monthly report just referred to.)

Owing to the severe criticism aroused by the cheapness of wages paid to operatives, *the spinning companies have decided to change the basis on which their published wages are calculated.* Hitherto—

(1) Wages paid to beginners—from 35 o 45 sen per diem—have been also taken into account in calculating average wages.

(2) At present prices the food given operatives costs 30 sen per diem for females and 32 or 33 for males, but the companies charge only 10 sen for females and 15 sen for males, the balance, 18 to 20 sen, being supplied by the companies, but this sum has not been included in the published wages.

(3) During the three months of July, August, and September (the hot weather in Japan) 50 to 60 sen a week has been given as diligence allowance to those operatives who attend work without missing a single day.

(4) At the end of each half-yearly term a sum of 5 yen on an average has been paid as term-end allowance.

(5) When operatives have served their term of employment of 2 or 3 years, a completed service bonus of about 15 yen on an average has been specially granted.

All these sums were not included in the wages published in the monthly reports. "Formal" wages which were published were low, but actual wages were higher because of additional sums granted, the alleged idea of the spinning companies being that it was necessary to keep "formal" wages low because wages once raised would be difficult to reduce even in a season of depression. But in order to guard themselves against public censure they now think it advisable to publish "actual" wages, including various sums paid in addition to regular wages and also the various increases in wages which they have effected. The result is that the average wages during May published by a certain company were 1 yen (as against 81 sen for April) for men; and 98 sen (as against 58 sen for April) for females. But now that prices are "madly high" and the cost of living is so enhanced, 1 yen for males and 98 sen for females are by no means high wages, however complete medical and other accommodations in the factories may be, especially in these days when the spinning companies are enjoying literally a golden age. By publishing actual wages, in place of "formal" wages, as they used to do before May, the spinners expose themselves to the charge that they do this in order to deceive the public to the belief that they have raised wages to a greater extent than they have really done.

Chugwai, *July 24th.*

ANNEX B.—ADVANCE IN OPERATIVES' WAGES.

In the first half-yearly term of the year, the various cotton spinning companies increased the wages of their operatives by from 10 to 20 per cent, and decided to pay their maintenance in money according to current prices, with the result that the average rate of wages of workmen from June onwards has considerably increased. Wages of male hands are Y1.0415 per diem—an increase of 23 sen compared with the preceding month and of about 40 sen compared with the same period of the preceding year; while those of female hands are Y0.8051—an advance of about 22 sen compared with the preceding month and of 36.4 sen compared with the preceding year.

CHUGWAI, *July 29th, 1919.*

ANNEX C.

[Mr. S. Muto on labour and the future of Japanese cotton spinning.]

JIJI, *23rd July, 1919.*

In the course of his speech at the ordinary general meeting of the Kanegafuchi Cotton Spinning Co., held on the 32nd instant, Mr. Muto made the following remarks:

"The improvement of labour conditions as a result of the formation of the League of Nations will be a grave problem in future. Nothing definite can be said about measures to be adopted in this matter until resolutions have been passed at the Washington conference in October. But I believe some exception will be recognized in favour of Japan, although such long hours as are in force at present will not be permitted. According to the Japanese factory law, all night work is permitted for 12 years more, but this time of grace will also be shortened to some extent. All night work is differently interpreted by different people. In England it means from 6 p. m. to 6 a. m., while according to a resolution passed at the Berne conference it means from 10 p. m. to 5 a. m. If the latter view is to be followed, Japanese spinners will have to adopt a double-shift system of 8 hours each. The limitation of working hours will result in reducing the present productive power by about one-third—that is, supposing the number of spindles owned by this company to be 500,000, the same result will be brought about as if we lost 150,000 spindles. To remedy this, it is necessary to increase the number of spindles, not with capital, but with sums laid aside by the company. But labour conditions in England, America, and other countries are likely to render management of business more difficult than here; therefore we may entertain an optimistic view in respect of the competition with which our cotton industry may be confronted in the Chinese market. Already Manchester goods come to China merely in order to maintain the market. The only questions which remain to be considered are the increase in the Chinese tariff and whether labour conditions in China will be easier than here. In the latter event, a serious blow will be dealt our coarse-yarn industry. For this consideration, the spindles which we are to get hereafter will all be for fine yarn. Further, we are engaged in extending the finishing factory in our Yodogawa works with a view to making an effort in the direction of cotton printing."

ANNEX D.

[Tables compiled by Mr. E. Hode Bunsen, of H. M. Consular Service, Japan.]

The following tables relative to prewar and current wages in Japan are attached hereto:

1. Increases in certain wages in Osaka, April-June, 1919.
2. Current wages in Tokyo.
3. Yokohama wages in July, 1914, compared with June, 1919.
4. Average wages paid in Tokyo in November, 1918.
5. Absolute highest and lowest wages paid in Tokyo, November, 1918.
6. Average wages before war. Statement taken from publication by Department of Agriculture and Commerce.

(Yen 1=2s. ½d. normally; at present yen 1=2s. 5½d.)

According to investigations made among 149 trades by the Osaka Chamber of Commerce as to wages current in Osaka during the last three months, the following show a change:

Nature.	April, average.	May, average.	June, average.	Same period of previous year, average.
	Yen.	Yen.	Yen.	Yen.
Rice cleaners	0.61	0.66	0.65	0.786
Flour millers	.50	.50	.55	.440
Spinners	.66	.66	.75	.526
Woolen textile weavers	.88	.90	.90	.646
"Yuzen" dyers	1.60	1.60	1.65	1.233
Copper smelters	.77	.772	.773	.705
Refiners	.75	.89	.89	.750
Casters	1.138	.137	1.132	1.060
Burners (?)	1.40	1.45	1.45	1.150
Agricultural implement makers	1.40	1.45	1.55	1.263
Cord walners	.89	.89	.92	.700
Crucible makers	1.50	1.40	1.40	1.300
Cement	1.50	1.60	1.70	1.083
Bricks	1.20	1.20	1.30	1.000
Candle makers	.80	.80	.90	.650
Match makers	1.16	1.33	1.33	.805
Printers	1.10	1.10	1.25	1.050
Bookbinders	1.88	1.88	1.30	1.109
Tanning	1.40	1.45	1.50	.809
Coolies	1.60	1.90	2.00	1.466
Male servants, monthly (with board)	13.00	13.00	15.00	10.000
Operatives in the tobacco monopoly bureau	1.04	1.04	1.05	.943
Contract workers in the military arsenal	1.38	1.31	1.48	1.128
Painters	.88	.99	.91	.650
Tyre makers	.85	.85	.70	.610
Bicycle makers	1.70	2.00	2.00	1.309
Conductors of tram car	.767	.764	.768	.633
Motormen of tram car	.807	.799	.794	.680

OSAKA MAINICHI, *9th August, 1919.*

According to the latest investigations made by the Tokyo Chamber of Commerce the average wages are as follows:

Nature.		Highest.	Ordinary.	Lowest.
		Yen.	Yen.	Yen.
Weavers	daily	1.50	1.20	1.00
Painters	do	2.30	2.00	1.70
Gold and silver smiths	do	3.50	2.00	1.00
Pouch makers	do	1.80	1.60	1.40
Dyers	monthly	28.00	25.00	20.00
Tailor (Japanese style)	do	39.00	31.50	19.50
Tailor (foreign style), cutter	daily	3.50	2.50	1.70
Tailor (foreign style), sewer	do	1.75	1.50	1.00
Sawyers	do	2.20	2.00	1.80
Carpenters	do	1.90	1.80	1.70
Plasterers	do	2.30	2.00	1.80
Tile setters	do	2.20	1.60	1.50
Cabinetmakers	do	2.00	1.80	1.50
Paper hangers	do	2.00	1.50	1.20
"Tatami" sewers (with board)	do	1.30	1.10	1.10
Joiners	do	2.00	1.80	1.20
Stone masons	do	2.50	2.25	2.00
Gardeners	do	1.50	1.30	1.25
Type setters	do	1.64	1.25	.98
Coolies	do	1.80	1.40	1.30
Male servants (with board)	monthly	18.00	13.00	10.00
Female servants (with board)	do	10.00	6.00	4.00

JIJI SHIMPO, *12th August, 1919.*

Comparative table of average wages paid in Yokohama in 1914 (July) and in 1919 (June).

[Taken from Yokohama Chamber of Commerce Journal.]

Labor.	Daily or monthly.	With board or not.	Average.	
			July, 1914.	June, 1919.
			Yen.	*Yen.*
Carpenters	Daily	Not	1.10	2.00
Plasterers	do	do	1.15	2.00
Painters	do	do	1.10	1.80
Tilers	do	do	1.20	2.30
Roofers	do	do	1.20	2.00
Bricklayers	do	do	1.30	2.30
Shipwrights	do	do	1.15	2.30
Furniture makers	do	do	1.00	2.00
Joiners	do	do	.95	2.00
Masons	do	do	1.25	2.00
Gardeners	do	do	.80	1.50
Tinsmiths	do	do	1.10	1.80
Whitesmiths	do	do	.85	.91
Paper hangers	do	do	.95	1.50
European style furniture:				
Engravers	do	do	.90	2.00
Painters	do	do	.70	1.80
Joiners	do	do	.90	1.80
Mat makers	do	do	1.20	2.00
Sawyers	do	do	1.15	2.00
Typesetters	do	do	.75	1.80
Printers	do	do	.70	1.80
Bookbinders	do	do	.70	1.80
Clog makers	do	do	.65	.90
Smiths	do	do	1.30	2.20
Firemen	do	do	.80	2.00
Day laborers	do	do	.60	1.70
Goldsmiths	do	do	.65	1.80
Pouch makers	do	do	.70	1.80
Silk handkerchief sewers:				
Male	do	do	.50	.....
Female	do	do	.30	.70
Hemp braid workers	do	Per 1 tan	.30	.25
Potters	do	Not	.85	2.00
Oil pressers	do	do	.42	1.50
Tailors (Japanese clothing)	do	With board [1]	.55	1.00
Varnishers [2]	do	Not [1]	.60	1.70
Bootmakers [2]	do	do	1.10	1.80
Harness makers [2]	do	do	1.10	1.60
Wheelwrights [2]	do	do	.60	2.00
Casters [2]	do	do	.65	2.20
Coopers [2]	do	do	.55	1.50
Cotton whippers [2]	do	do	.80	1.30
Rice cleaners [2]	do	With board [1]	.50	.....
Dyers [2]	Monthly	do	7.00	15.00
Washerman [2]	do	do	8.00	30.00
Japanese "Tabi" makers [2]	do	do	10.00	15.00
Confectioners: Japanese style [2]	do	do	15.00	30.00
Foreign style [2]	do	do	15.00	30.00
Domestic servants:				
Male [2]	do	do	4.00	10.00
Female [2]	do	do	3.50	8.00
Tailors (European clothing)	do	Not	28.00	45.00
Soy brewers	do	do	17.00	20.00

[1] Board included in 1919 only. [2] Board included in 1914 and 1919.

The following note re stevedoring labor rates is supplied by a Yokohama firm: "The average coolie wages for stevedore coolies in July, 1914, was Y1.40 per coolie per day; in October, 1918, it had risen to Y3 per day, and this is the average rate ruling at present."

Statement showing average wages paid in Tokyo in November, 1918.

Description of occupation, trade, or factory in which employed.	Males.		Females.	
	Over 15 years.	Under 15 years.	Over 15 years.	Under 15 years.
	Yen.	*Yen.*	*Yen.*	*Yen.*
I. Dyeing and weaving trades:				
Filature (silk)	0.64	.....	0.57	0.27
Spinning	.82	0.44	.54	.36
Weaving	.83	.39	.54	.40
Dyeing	.83	.33	.45	.28
Knitting	.91	.36	.50	.30
Various	.85	.53	.40	.33
II. Machinery and tool-making trades:				
Machine making	1.12	.37	.45	.....
Electrical machinery and tool making	1.00	.38	.42	.29
Ships and vehicles	1.07	.32	.42	.28
Tools	1.12	.30	.42	.30
Steel and iron foundries	1.23	.34	.51	.38
Casting	1.00	.27	.47	.....
Metal ware	.94	.44	.42	.39
Plating	1.40	.27	.45	.27
III. Chemicals:				
Earthenware	1.03	.....	.37	.....
Glass	1.11	.43	.43	.37
Cement	1.27	.....	.53	.....
Corks	.60	.35	.30	.....
Crucibles	1.58	.31	.48	.....
Bricks	1.03	.45	.54	.....
Paper makers	.83	.37	.36	.27
Leather	1.61	.....	.52	.....
Explosives	1.12	.....	.....	.....
Oil	.84	.....	.45	.25
Drugs and medicines	.80	.45	.39	.25
Rubber	.78	.46	.39	.32
Toilet goods	.83	.50	.46	.37
Soaps	.84	.31	.49	.32
Dyestuffs	.84	.44	.41	.31
Artificial manure	1.06	.....	.49	.....
Celluloid goods	.80	.....	.38	.....
IV. Provisions:				
Brewing	.66	.42	.40	.30
Sugar refining	1.10	.....	.51	.....
Rice and flour mills	1.09	.....	.47	.....
Confectionery	.79	.35	.49	.37
Marine products	.89	.....	.50	.....
V. Various:				
Printing and bookbinding	.99	.45	.56	.30
Paper ware	.92	.54	.39	.25
Lumber and turnery	1.06	.....	.45	.....
Leather manufactures	1.54	.45	.63	.46
Wool and feather	.95	.....	.63	.....
Sewing	1.05	.38	.68	.35
Netting	.65	.33	.35	.30
Hats	.95	.37	.56	.34
Pencils	.88	.39	.41	.27
Various	.94	.42	.45	.35
VI. Others:				
Electric works	.77	.....	.43	.....
Gas works	.74	.....	.38	.....
Metal foundries	.99	.....	.50	.....

Statement showing absolute highest and lowest daily wages paid in Tokyo, November, 1918.

Description of occupation, trade, or factory in which employed.	Males.				Females.			
	Over 15 years.		Under 15 years.		Over 15 years.		Under 15 years.	
	Yen.		Yen.		Yen.		Yen.	
	H.	L.	H.	L.	H.	L.	H.	L.
I. Dyeing and weaving trades:								
Filature (silk)	1.70	0.20						
Spinning	2.36	.28			2.00	0.12	0.53	0.07
Weaving	1.63	.30	0.60	0.30	1.00	.22	.60	.20
Dyeing	2.15	.30	.72	.20	1.38	.20	.59	.20
Knitting	3.00	.28	.43	.23	.65	.27	.33	.20
Various	2.00	.45	.65	.25	2.00	.25	.50	.20
II. Machinery and tool-making trades:			1.00	.30	.70	.28		
Machine making	3.34	.25	.60	.20	.70	.25		
Electric machine and tool making	3.11	.25	.95	.24	.95	.23	.45	.20
Ship and carriage building	2.57	.30	.55	.20	.61	.27	.32	.25
Steel and iron foundry	7.10	.30	.45	.25	.90	.30	.58	.57
Casting	2.00	.30	.36	.20	.72	.25		
Metalware making	2.00	.25	.80	.25	1.55	.25	.64	.30
Plating	6.00	.34	.30	.24	.62	.30	.30	.24
III. Chemical:								
Earthenware	1.40	.65			.45	.20		
Glass	3.50	.30	.55	.25	.64	.20	.45	.28
Cement	2.87	.68			.72	.46		
Cork	1.04	.30	.35	..	.45	.25		
Crucible	3.78	.41	.31	..	.31	.25		
Brick	2.00	.50	.50	.40	1.60	.30		
Paper making	2.00	.30	.65	.26	.80	.24	.60	.20
Leather	2.89	.34			.62	.34		
Explosive	1.50	.85						
Oil	1.41	.43			.60	.37		
Drugs and medicines	2.50	.20	1.00	.21	.68	.26	.30	.20
Rubber	3.15	.28	.94	.30	.94	.20	.48	.26
Toilet goods	1.20	.50	.50	..	.80	.30	.53	.25
Soaps	2.00	.35	.33	.24	.90	.30	.40	.27
Dyes and paints	1.81	.41	.52	.41	.86	.31	.31	..
Manures, artificial	1.95	.70			.86	.35		
Celluloid goods	2.50	.30			.55	.20		
IV. Provisions:								
Brewery	1.50	.38	.47	.38	.60	.30	.30	.29
Sugar refining	2.02	1.01			.72	.28		
Rice and flour mill	2.27	.30			.65	.25		
Confectionery	2.80	.20	.47	.23	1.10	.20	.68	.12
Marine products	1.20	.33			.58	.35		
V. Various:								
Paper ware	2.00	.35	1.00	.30	.73	.25	.30	.22
Lumber	3.00	.35			.69	.20		
Leather	3.29	.35	.71	.22	1.49	.20	.81	.20
Sewing	1.65	.66	.40	.35	1.20	.35	.50	.30
Feather	2.00	.45			1.20	.22		
Netting	1.08	.20	.39	.28	.55	.30	.31	.27
Hats	2.20	.38	.42	.36	1.15	.32	.36	.31
Pencil	1.50	.20	.50	.28	.62	.28	.36	.20
Printing and bookbinding	2.30	.27	.88	.20	1.07	.27	.62	.22
Various	2.35	.30	.60	.27	.93	.24	.35	.23
VI. Other:								
Electric works	1.55	.36			.45	.40		
Gas works	1.09	.35			.60	.30		
Metal foundries	2.17	.55			.75	.40		

Statement showing average wages before war, taken from report (in Japanese) published by Department of Agriculture and Commerce, March, 1919.

	Wages before war.		
	Men.	Women.	Children.
I. Dyeing and weaving trades:	*Sen.*	*Sen.*	*Sen.*
Filature (silk)	40	28	14
Spinning	46	30	22
Yarn twisting	40	26	14
Floss silk working	.....	35	.....
Cotton whipping	46	18	22
Weaving	44	29	14
Dyeing	54	28	19
Knitting	44	24	18
Embroidery	.....	.....	.....
Various	55	32	13
Average	46	27	17
II. Machinery and tool-making trades:			
Machine making	61	31	18
Ship and carriage building	69	30	23
Tool making	60	27	23
Metalware making	61	22	18
Average	62	27	21
III. Chemical:			
Earthenware	54	27	18
Paper	46	20	14
Lacquer	56	17	18
Tanning	46	24	11
Explosives	50	27	16
Oil and waxes	59	28	19
Drugs and medicines	44	26	15
Rubber	53	25	18
Toilet goods	34	24	13
Soap and candles	39	23	21
Dyestuff, paint, etc	58	31	21
Artificial manure	60	28	30
Various	45	25	23
Average	49	25	18
IV. Provisions:			
Brewery	47	25	18
Sugar refining	47	26	.....
Tea firing	54	25	12
Flour, rice mill	48	25	25
Mineral water	56	27	.....
Confectionery	43	26	19
Canned goods	55	33	16
Stock feed	55	20	15
Marine products	63	28	.....
Various	39	23	15
Average	50	27	17
V. Various:			
Printing and bookbinding	49	28	19
Paper ware	56	29	15
Bamboo ware	54	26	23
Leather manufactures	76	24	.....
Feather manufactures	62	27	15
Matting, braids, etc	38	25	.....
Hornes, bornes, stones, etc	45	34	26
Various	50	26	19
Average	61	27	20
VI. Other:			
Electric works	67	.....	.....
Gas works	78	24	.....
Metal foundries	56	25	27
Average	67	25	27

ANNEX E.

Principal strikes occurring in Japan during May, June, and July and the first part of August, 1919.

Institutions.	Number of labourers on strike.	Reason for strike or percentage of increase demanded.
Ikuno Silver Mine	900	On account of dissatisfaction with their wages.
Kurashiki Spinning Mill	50	Do.
Tokiwasha Silk Mill	500	Do.
Toba Shipyard	(1)	20 per cent.
Aichi Watch Works	150	40 per cent.
Osaka Electric Copper Refining Co.	600	30 per cent.
Nippon Sharyo Kaisha	250	On account of dissatisfaction with their conditions.
Toyo Match Factory	200	30 per cent.
Osaka Electric Co.	400	Do.
Sakayo Miyada Iron Works	(1)	20 per cent.
Tsukijima Shipyard	700	40 per cent.
Ishikawajima Shipyard	2,500	Do.
Osaka Iron Works	150	30 per cent.
Amagasaki Shipyard	90	100 per cent.
Osaka Car Manufactory	1,900	30 per cent.
Sumitome Iron Works	400	40 per cent.
Tokorozawa Aeroplane Works	100	20 per cent.
Hakubunkwan Printing Office	1,600	30 per cent and 8-hour system.
Nippon Shoe Works	63	35 per cent.
Hattori Works	200	50 per cent.
Osaka Stone Cutters	4,700	Do.
Tonda Iron Works	200	Do.
Tsukijima Shipyard	200	20 per cent.
Asano Slate Works	138	30 per cent.
Metre Factory	300	Do.
Toyo Iron Works	600	Unknown.
Yokohama Dock	2,160	40 per cent.
Nihon Metre Works	200	Unknown.
Tokyo City Trams	700	30 per cent.
Japan Gramaphone Works	300	50 per cent.
Nihon Dyestuff Works	250	30 per cent.
Tokyo Gas Co.	400	50 per cent.
Tokyo Newspaper Printers	(1)	Unknown.
Kawasaki Dockyard	200	20 per cent.
Asano Iron Works	370	40 per cent.
Asano Shipyard	360	60 per cent.
Tsurumi Reclamation Co.	170	40 per cent.

[1] Unknown.

ANNEX F.

[Despatch from Mr. Bellby Alston, C. B., H. M. Minister, Tokyo. Dated August 2, 1919. Recording the formation of a new "Cooperation and Harmony" Society and forwarding comments thereon from the Vernacular press.]

An attempt is being made in Japan to advance one step further towards the solution of labour problems by the organisation of a society called the Kyochokwai, or the "Cooperation and Harmony Society," the promoters of which are such well-known public men as Prince Tokugawa, president of the House of Peers, Mr. Ooka, president of the House of Representatives, Viscount Kiyoura, vice president of the Privy Council, and Baron Shibusawa, the most famous business man in Japan. The prospectus of the society lays stress on the necessity of doing away with old-fashioned ideas in order to promote harmony between capital and labour, while Baron Shibusawa declares that in view of the rapid inflow of occidental ideas into this country the traditional "kindness principle" can hardly solve present-day labour problems.

The Tokyo "Nichi Nichi," commenting on the objects of the new society on the 26th July, complains that those responsible for its formation have no intimate relations with the working classes. Their avowed aspirations do, however, prove that the upper classes have been awakened to the necessity of dealing with labour problems. Although the dangerous tide of labour is flowing very rapidly, however, valuable time is going to be wasted by the society in engaging in various social investigations the results of which cannot be carried into effect for many months. What is wanted immediately by most of the labourers is security in living, and labour disputes will not end until supplies of food are made abundant and prices lowered considerably.

The "Jiji" admits that the aspirations of the Kyochokwai are commendable, but wonders if it can carry out its intentions, as it is not representative of capital or labour. In fact, Baron Shibusawa, one of the promoters, says that though the objects of the society are clear enough, there is some doubt as to whether it can enjoy the confidence of both capital and labour. The solution of labour problems rests with the Government, capitalists, and labourers, but the Government is not going to do anything to that end, transferring its duties to a society of the character of the Kyochokwai. This action on the part of the Government gives a complexion of charity to the measures for the solution of labour problems. This policy is wrong, and the authorities must know that the problems of labour are entirely different from those of poverty. If attempts are made to solve the labour question by charitable means, the solution may be rendered more difficult.

The "Yomiuri" welcomes the organisation of the Kyochokwai, but declares that the proposal should be called too late rather than timely. The object of the society is a worthy one, but the persons responsible for its management must have a clear vision as to how capital and labour should cooperate. It is no exaggeration to say that the fate of the country depends on the solution of the labour problem, and the importance of the task of those who work for that solution cannot be overestimated.

The "Hochi" of the 26th July wrote: "Needless to say, the object of international labour legislation is to promote, not destroy, the industrial system of the world. Japanese capitalists should forego their narrow-minded views of the labour situation and carry out an improvement of labour conditions in accordance with the spirit of international labour legislation."

"The original object of the newly formed 'Kyochokwai' was to mediate between the two classes and prevent disputes, but the programme was subsequently altered, and its principal object is now to study labour problems with a view to promoting harmony between capital and labour. The promoters of the society are apparently now in favour of recognising trade-unionism in this country—an attitude which points to an improvement in their views of the labour problem. It also shows that the ideas of the capitalist classes toward labourers are changing and inconstant. It is earnestly to be hoped that proper steps will be taken to meet the spirit of the international labour legislation."

ANNEX G.

[Despatch from Mr. Hugh Horne, H. M. Commercial Secretary of Embassy, dated Yokohama, September 12th, 1919, dealing with the latest situation of the labour problem in Japan.]

Interest in the labour question is for the moment centred on the possibility and advisability of adopting an 8 hours' day and many and varied opinions are being expressed. Attention is largely focused on the cotton spinning industry, which is evidently being regarded as the test industry for a decision, and Mr. Muto, managing director of the Kanegafuchi Cotton Spinning Company, who has been elected though not yet officially nominated as the representative of capital at the forthcoming International Labour Convention at Washington, has declared himself opposed to the 8 hours' system as being highly injurious to Japanese industries in general, and in particular to the textile industry. After a lengthy discussion between Mr. Muto and the standing committee of the Osaka Industrial Association, at which the former was, apparently, unable to carry his points in entirety, the following resolutions were passed by the association:

(1) That an 8 hours' day be recognized in principle, but that the time required for meals, rest, and beginning and finishing of work (*sic.*) is not to be included in the 8 hours.

(2) That extra work may be done, within certain limits, by mutual agreement between employers and employees.

(3) That, in addition to the requirements of the factory act, suitable grants are to be made to married female hands before and after confinement. Female labour is not to be employed between the hours of midnight and 5 a. m.

(4) That the minimum age of workers is to be 12 years, and that workers under 15 years of age must not be employed between the hours of midnight and 5 a. m.

(5) That the time is not ripe for adhering to the Berne Convention with respect to the manufacture of yellow phosphorous matches, but that suitable measures should be adopted as soon as possible for putting a stop to the manufacture and sale of such matches.

Some of the above resolutions do not bear directly on the 8 hours' question, but are of collateral interest.

The labour committee of the Osaka Chamber of Commerce have passed the following somewhat similar resolutions:

(1) That an 8 hours' day be adopted in principle, but that regulations in this respect should not be made applicable to agriculture, fishery, mercantile marine, seasonal (*e. g.*, tea), and other special industries.

(2) That the operation of this system should be deferred for a reasonable period in respect of those industries, which are unable to adopt it, without serious loss and inconvenience immediately on its establishment.

(3) That at the request of workers themselves working hours may be extended within certain limits.

(4) That a 48 hours' week would be prejudicial to the interests of this country, where the practice regarding holidays differs materially from that obtaining in Europe and America.

There were other resolutions similar to those passed by the Industrial Association regarding women and children, but the closed hours were given as between 10 p. m. and 4 a. m. or, in special cases, midnight to 6 a. m.

The chief obstacles in the way of the 8 hours' day for the textile industry in Japan are (1) the difficulty in obtaining machinery and (2) shortage of female labour. So far as British machinery is concerned the difficulty is a very real one. It is promised that 500,000 spindles ordered during the war shall be delivered at an increased cost of 50 per cent by the autumn of next year, but spindles ordered after the signing of the armistice will not arrive until 1922. In view of the probability of the introduction of the 8 hours' system, large extensions are contemplated, but the necessary machinery can not possibly be installed within three years; it is, therefore, in local opinion incumbent on the delegates to the conference to obtain a postponement of at least three years if the change is to come into force in the near future.

The problem of female operatives is more apparent than real. It is true that there was a decided shortage during the early months of this year, but the general increase in wages has improved the situation. With decreased hours, uniformly higher wages, and improved treatment, there should be no scarcity, particularly as women much prefer factory life to work at home or on the farms.

While the textile industry is, in the main, opposed to the introduction of an 8 hours' day, it is of interest to learn that the Dai Nippon Boshoku Kaisha, at Owada, near Osaka, has already adopted the system with success. This company is of very recent formation; so too much weight should not be attached to their reports. One or two other works have also made the change.

The strike situation has improved considerably, though the movement is by no means dead. Among recent outbreaks may be mentioned strikes at the Uchida Dockyard, which was speedily settled by an increase of wages; at the Okumura Electric Company, Kyoto, which was organised unsuccessfully by Mr. Suzuki Bunji, president of the Yuaikwai; at the Hitachi copper mine of Messrs. Kuhara & Co., when the workmen agitated, not only for an increase in wages, but for an equal distribution of profits between employers and employed—needless to say without success; and at the military arsenal at Tokyo, which involved many thousands of workers. This last effort failed in effect, though as a result a labour union, with a membership of over 10,000, has been established, and it is probable that the whole of the 27,000 workers at the arsenal will untimately be enrolled.

There are now in existence four bodies or groups of individuals lending material or immaterial assistance to labour in its conflict with capital, and publications on the subject of labour are coming more and more into the public eye. I learn that any publication with the word "Rodo" (labour) appearing in its title is sure to sell well. The magazine "Rodo Mondai Kenkyu" (Studies of the Labour Problem), published by Professor Kawakami, of Kyoto University—leader of one of the groups referred to above—goes through several editions of each issue. When the first number was published, 200,000 copies of the first edition were sold; it is now in its fifteenth edition.

The voice of labour is beginning to be heard, and it has a force with which the Government must reckon sooner or later. At the present time strikers are, strictly speaking, prohibited under Article XVII of the police law for the preservation of the public peace, but it is now publicly reported that a bill is to be introduced into the Diet this winter aiming at the cancellation or modification of the above article and providing adequate legislation for controlling strikes and lockouts.

ETHYL CHLORIDE.

[Paragraph 29.]

BRIEF OF THE GEBAUER CHEMICAL CO., OF CLEVELAND, OHIO, AND THE FRANCO-AMERICAN CHEMICAL WORKS, OF CARLSTADT, N. J.

Ethyl chloride is a colorless liquid widely used in the United States for medicinal and mechanical purposes. It belongs to the drug and chemical schedule and is manufactured from alcohol, zinc chloride, sulphuric acid, and hydrochloric acid.

Ethyl chloride has been known to the chemical world since approximately 1845 and was first applied to practical use in this country in about 1900. Its first use was in the medical profession where its value as a local anesthetic became immediately recognized. Its anesthetic effect is produced by a process which may be best described as freezing or refrigeration. Applied to the human flesh by a vaporized spray, through its rapid evaporation it produces in the part to which applied a coldness and numbness which renders such portion immune to pain by benumbing the sensitory nerves. It has been thus very valuable for minor operations, such as opening of abscesses, carbuncles, subcutaneous tumors, felons, and similar disorders where lancing is resorted to. Its value as a surgical agency is also due in large part to the fact that its application is attended with none of the dangers resulting from other anesthetics, such as ether, chloroform, or cocaine, which must be either inhaled or injected hypodermically.

Ethyl chloride is also used as a general anesthetic for major operations. When used for minor operations it is applied to the flesh and when used as a general anesthetic for major operations it is inhaled by the patient in the same manner as ether and chloroform and produces unconsciousness the same as those two drugs. For a simple major operation, lasting for from three to five minutes, ethyl chloride is considered much safer than other anesthetics, since its use is not attended with the dangers and resultant disasters to the respiratory and pulmonary organs so commonly following the use of ether or chloroform.

When used as a general anæsthetic, that is by inhalation, it possesses the further advantage of producing anæsthesia very rapidly. The patient can be anæsthetized with ethyl chloride in 3 minutes where ether requires ordinarily from 10 to 20 minutes to produce the same degree of unconsciousness. Naturally its use for this purpose has become very general. In American hospitals it has come to be used quite generally for protracted major operations as a preliminary to ether. The ethyl chloride is administered to produce anæsthesia rapidly and when the patient has thus been rendered unconscious ether is then administered when an operation lasting from 30 minutes to an hour or longer is undertaken. Moreover, ethyl chloride produces less nausea than other anæsthetics, which adds to its medical value.

The experiments, the research work, the development of its possibilities, and the practical application of ethyl chloride have all been conducted by American manufacturers of the product and American chemists working in conjunction with these manufacturers. The use of this drug has become distinctly American. The fact is generally recognized that surgery has been developed in America to a greater degree than in any other country. Surgical operations, both minor and major, are much more common and much more popular in the United States than in any other nation of the world. The result of this is that the United States is to-day the great world market for the consumption of all forms of anæsthetics, and this country furnishes the principal market for the sale of ethyl chloride.

The value of ethyl chloride as an anæsthetic was amply demonstrated during the recent World War. The United States Government has purchased ethyl chloride for use in its Army and naval hospitals for the past 15 years. From the time that the United States entered the war until the signing of the armistice at least one-half the entire production of ethyl chloride of the Gebauer Chemical Co. and of the Franco-American Chemical Works was purchased by the American Government for war purposes. The Government records and the records of these two firms will show that the American manufacturers supplied this article to the Government at practically cost as a patriotic contribution to the successful conduct of the war.

In the industrial world ethyl chloride is used as a refrigerating medium for small ice machines or refrigerators. It possesses an advantage over all other refrigerating mediums in that the vapors can be compressed and liquified at a low pressure, about 20 pounds to the square inch. Other refrigerating mediums, such as ammonia, require about 240 pounds pressure to the square inch to liquify. Owing to the low pressure required to liquify it, ethyl chloride possesses a distinct advantage over other refrigerating mediums, since it requires less power. During the World War the

United States Navy Department equipped small vessels, such as torpedo boats, torpedo boat destroyers, etc., with ice machines or refrigerators, using ethyl chloride because of the fact that this ingredient permitted the use of small power plants for the operation of these machines. Ethyl chloride is undoubtedly the ideal refrigerating medium for the small ice machines, which will eventually replace the present-day refrigerators in the American home.

In the industrial world ethyl chloride is also used for ethylation by large concerns which manufacture dyestuffs and by manufacturing chemists and druggists who compound pharmaceutical preparations.

It should be stated that for use in the industries ethyl chloride is sold in bulk, but for use in medicine and surgery, because of its extreme volatility and inflammability, it is sold in glass or metal containers which hold from 40 to 100 grams.

Ethyl chloride has been manufactured for some time in European countries, particularly in Germany, although France and Switzerland have manufactured this product in lesser amounts. Prior to the war German competition in the American market for ethyl chloride became a serious factor because of the cheaper raw materials in that country and the lower cost of labor. While to Americans belongs the credit of discovering and developing the practical use and advantages of ethyl chloride, they faced the loss of the very market which they had created to this German competition. The Germans were able to manufacture and deliver in America this product at a price considerably below the actual cost of production to the American manufacturer. With the close of the war and the restoration of trade relations with Germany the American manufacturers of ethyl chloride face the utter destruction of their industry unless relief is extended to them in the shape of a protective tariff.

In comparing prices of raw materials and the cost of labor in the United States and Germany present-day figures are not obtainable by reason of the impossibility of securing accurate data from abroad or else the figures are obscured by the fluctuation in the rates of exchange. Figures are, however, available which demonstrate the handicap under which American manufacturers labored in comparison with the German manufacturers prior to the outbreak of the World War.

The following table of prewar prices of labor and the principal ingredients of ethyl chloride in Germany and in the United States forcibly demonstrates our contention:

Article.	In Germany.	In the United States.
Alcohol	22 cents per gallon	40 cents per gallon.
Sulphuric acid	$\frac{1}{10}$ cent per pound	$\frac{1}{2}$ cent per pound.
Zinc chloride	3½ cents per pound	5 cents per pound.
Labor	4 marks, or 96 cents per day	$3.50 per day.

At the present time in the United States alcohol costs the manufacturer from 65 cents to 82 cents per gallon, sulphuric acid 1½ cents per pound, and zinc chloride 13½ cents per pound. Labor in the United States in this industry at the present time costs $6 per day. It is well known that chemicals are extremely cheap to-day in Germany and labor in that country is pauperized and working at a merely nominal pittance.

Before the outbreak of the war ethyl chloride could be procured in Germany at about 18 cents per pound in bulk and at 20 cents per tube in 60-gram tubes. At the same time it cost the American manufacturer about 52 cents per pound to manufacture ethyl chloride for sale in bulk, while the cost in 60-gram tubes, packed and ready for the market, was 70 cents per tube.

Under the Payne-Aldrich Tariff Act the duty on ethyl chloride was fixed at 30 per cent ad valorem. In the Underwood-Simmons Act the duty on ethyl chloride was reduced to 20 per cent ad valorem. Your petitioners feel that for the maintenance of the ethyl-chloride industry against foreign competition, and particularly against the competition from Germany, the duty in the proposed tariff bill should be fixed at 35 cents per pound in bulk and on ethyl chloride in tubes or containers 100 per cent ad valorem, plus $1 per pound of the ethyl chloride content. The high duty on ethyl chloride in tubes is required for the reason that ethyl chloride for use in surgery must be chemically pure. To produce the essential degree of chemical purity requires extreme care and skill on the part of the manufacturer. For the industrial and mechanical arts a lesser degree of chemical purity is required.

We have taken the liberty of setting forth at considerable length the various uses to which ethyl chloride is applied in medicine and in the industries in order that its importance may be appreciated and in order that your committee may understand the necessity for preserving the industry in the United States. With the prevailing

situation in Germany, with their cheap supplies of labor and plentiful supplies of the raw materials necessary for the manufacture of this product, it becomes apparent that unless relief is afforded the American ethyl chloride industry by a substantial tariff protection its prostration is inevitable. It may be conservatively stated that this industry represents a capital investment in the United States of at least $500,000.

For two outstanding reasons it appears to us that the protection requested should be extended. It is primarily an infant industry in which American initiative, American labor, and American raw materials need some defense and protection against the cheaper labor and the cheaper raw materials and the imitative processes of European countries. A second and perhaps even more important reason why this protection should be extended to the ethyl chloride industry is based upon the necessity for its existence and encouragement as a part of our national defense and national self-sufficiency. Unless there continues to exist an American ethyl chloride industry it would necessarily follow, in the unhappy event of future wars, that this country would be dependent for its supplies of this article upon foreign nations, from which we might be either entirely cut off or with which, as enemy countries, we could not trade.

LOGWOOD EXTRACT.

[Paragraph 30.]

BRIEF OF UNITED STATES MANUFACTURERS OF LOGWOOD EXTRACTS.

The undersigned, on behalf of the manufacturers of logwood extracts throughout the United States, begs leave to call to the committee's attention the following essential facts which necessitate a revision of the tariff act of October 3, 1913, paragraph 30, so as to increase the duties on logwood extracts in order that United States manufacturers of logwood extracts may fairly meet the competition of foreign manufacturers of similar products.

Paragraph 30 reads as follows: "Extracts and decoctions of nutgalls, Persian berries, sumac, logwood, and other dyewoods, and all other extracts of vegetable origin suitable for dyeing, coloring, or staining, not specially provided for in this section, all the foregoing not containing alcohol and not medicinal, three-eighths of 1 cent per pound."

By the tariff act of 1894 logwood extracts were assessed a duty of 10 per cent ad valorem. In 1897 this ad valorem rate was changed to a specific rate of seven-eighths of 1 cent a pound. The act of 1913 as above, which act is now in force, reduced this rate to three-eighths of 1 cent per pound.

AMENDMENT RECOMMENDED.

The United States manufacturers of logwood extracts urgently recommend that the present act, that is, that portion of the tariff act of October 3, 1913, paragraph 30, be amended in so far as it refers to logwood extracts to read as follows:

> Extracts of logwood (dry or crystals), 3 cents per pound; extracts of logwood (in what is commercially known as "solid" or block form), 2½ cents per pound; extracts of logwood (pastes or liquids of 51° twaddle or less), 1½ cent per pound.

REASONS FOR THE AMENDMENT RECOMMENDED.

The general reason for recommending the above higher and classified duties is that since the act of 1913 large additional plants for the manufacture of logwood extracts have been erected in the West Indies to take advantage of the cheap West Indian labor and of the proximity of the raw material from which the extracts are made.

The classification is recommended because of the fact that logwood extracts are manufactured and sold under three distinct forms of concentration and the present act is unscientific in that it takes no account of that fact.

The increases recommended above are based upon what has been figured as the average difference in costs of labor in the island of Jamaica, where most of the West Indian plants are, plus the difference between the cost of freighting the raw material to the United States manufacturers and the cost of freighting the finished manufactured extracts from the West Indies to the United States. The cost of labor in the island of Haiti and San Domingo is less than in Jamaica, but the plants in Haiti at the present time are small and unimportant. The increases asked for will not more than cover on the average what is confidently assumed will be the difference between the cost of producing logwood extracts in the West Indies in the plants now existing there and

the cost of producing the same extracts in the United States if the ratio of difference in labor costs between the two countries continues to be about the same as it is now.

The logwood extract industry in the United States is one of the oldest. Its production capacity is probably 50 per cent more than normal requirements of consumers. Its product is an absolute essential in certain branches of the leather industry and in certain branches of the textile industry. The color used for practically all black leather is logwood extract. Logwood extract is recognized by woolen manufacturers for its quality for producing the best black shades on their fabrics. In spite of urgent appeals made by the industry to previous tariff committees, it has never received adequate protection against cheap foreign labor, and this fact, no doubt, has had much to do with the establishment of the new large West Indian plants.

Previous to the war the competition of the West Indian factories was very injurious, as the duty of three-eighths of 1 cent per pound was insufficient to equalize production cost in the United States. The product these foreign factories exported to this country was the dry color of highest concentration. This condition just previous to the war was one of the reasons why the plants that were struggling to exist in the United States had been reduced to four in number, as follows:

John D. Lewis, Providence, R. I.; Stamford Extract Manufacturing Co., Stamford, Conn.; Oakes Manufacturing Co., Long Island City, N. Y.; American Dyewood Co. (a subsidiary of the United Dyewood Corporation having plants in Europe and the West Indies), Chester, Pa.

The advent of the war, bringing with it the cutting off of supply of competing German aniline colors, caused a tremendous increase in the demand for logwood extracts. Greatly increased numbers of textile and other manufacturers found that, to a great extent, they could, to the surprise of many of them, get thir color results by using logwood extracts and other dyewood extracts instead of aniline colors. Numerous testimonials to that effect were received from textile manufacturers. To this discovery was due the keeping in normal operation of many industries, some of them essential in supplying war materials that otherwise would have been seriously embarrassed if not compelled to shut down.

It seems to be vitally important that the logwood extract industry should be protected at this time by these increased duties. The fact that the maximum production capacity of the United States plants is estimated to be more than 50 per cent in excess of the normal requirements of the United States consumers will insure to the latter an active competition based upon home costs, individual efficiency, and the merit of the manufactured product. The increased cost of dyeing that these additional duties will cause to American consumers of textile and leather products, constituting practically the entire market for logwood extracts, will be so small as to be not worth considering.

The importance of the United States logwood extract industry has been stated above. Furthermore, it assures our textiles and leather manufacturers of a steady domestic supply of a staple product during normal times, and, on the other hand, in the event of war, when the output of American aniline color plants might be diverted to war purposes, the dyewood plants could take care of the emergency color requirements in the same way as they did in the very recent past.

Logwood, the raw material, is the product of a tree that grows in the semitropical regions, principally in the West Indies, Mexico, and Central America. The plants in the United States draw their supply mainly from the West Indies. The importations of the wood into the United States during the recent war ran as high as 130,000 tons per annum. During normal times it is difficult to say what the quantity will be, but it is reasonable to expect at least half that amount. The use of logwood extracts is increasing, as a result of the experiences of textile and other manufacturers during the war.

The prices that have been prevailing are: Dry or crystals, 30 cents per pound so-called "solid," 22 cents per pound; pastes or liquids, 15 cents per pound.

Taking into consideration the salutary effort now being made to protect the aniline color industry in the United States, we wish to point out that an inadequate duty on logwood extracts will permit foreign manufacturers of such extracts to flood the United States markets with the low-cost foreign-made extracts that compete with the aniline-color blacks and at prices so low as possibly to nullify, so far as blacks are concerned, the effect of the aniline-color duties. For adequate protection of the whole dyestuff industry of the United States, many of the manufacturers of logwood extracts feel that the duties should be at least 50 per cent higher than urged in this brief. The feeling is that only in this way may the logwood industry be assured of a chance to thrive. Its intimate association with a "key industry," the coal-tar color industry, may not be overlooked in this connection.

The increased rates as specified above will surely provide no more than fair protection for the labor of the United States manufacturers in competition with the cheap native labor of the West Indies. We understand our American wage ratio is at least as 4 to 1 when compared with Jamaica, the rate in Jamaica being 80 cents per day, in Haiti 30 cents per day.

The undersigned desires to state, in conclusion, that with the other concerns in this country engaged in the logwood-extract business, the undersigned is in open, active, and, it is believed, fair and wholesome competition. But the interests of all are common to the extent of desiring to secure for the industry in the United States of America immunity from alien competition, based upon cost and wage schedules, the like of which are impossible under domestic industrial and economic conditions.

OAKES MANUFACTURING CO.,
By FRANCIS J. OAKES, Jr., *President.*

SUMAC EXTRACT.

[Paragraph 30.]

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

Of leather tanning materials, sumac, if not one of the most extensively used, is nevertheless one of the most useful and recommendable for upper leather of rather delicate quality. Although chrome tanning has, by reason of the cheaper cost, substituted the use of sumac to a certain extent, tanners, the reputation of whose product has been traditionally identified with certain high qualities that can be secured only with sumac, can not dispense with its use. It is therefore an indispensable tanning material for a certain class of leather.

Tanning materials bear a greater relation to the cost of finished leather than is generally thought and at the unprecedented high cost to which war has brought hides and undressed skins, the supply of which was already before the war not keeping pace with the needs of consumption, they are entitled to as much exemption from fiscal burdens as consistent with the needs of revenue and the endeavor for a reduction in the high cost of living.

The supply of tanning materials, with the deforestation of tannin yielding trees, such as the oak, the hemlock, the chestnut, the quebraco, etc., is continually getting lower, and their price, even with the readjustment of the afterwar, is bound to continue by the law of supply and demand and by reason of the increased cost of production at a much higher figure than in prewar days.

Imported or Sicilian sumac furnishes an extract appreciated both for its high percentage of gallotannic acid as for its light color, a reason why, in the dyeing or mordanting of textiles in which it is also used, it is preferred to domestic sumac, of which 4,512,361 pounds were produced in 1914 against an average annual importation for the last seven fiscal years of 14,521,875 pounds.

Sumac, whether in leaf of ground, is now on the free list, where it should be kept, as it does not enter into competition with domestic production to any extent adequate to the requirements of the tanning industry of this country, interested now more than ever in obtaining its taw materials at the lowest possible cost.

Sumac extract is now assessed at the rate of three-eighths of 1 cent per pound, equal to a protection of $7.50 per ton in favor of the domestic article, quoted at 51 degrees at 8 cents per pound, against 14½ cents for the stainless Sicilian, and showing a difference in price far more striking than in the case of domestic sumac, selling at $60, and Sicilian sumac, quoted at $70 per ton. In both cases the higher cost of the imported article would be per se sufficient protection to the domestic product, without necessity of further addition.

In conclusion this chamber recommends that sumac, both ground and in leaf, as well as the tanning extracts referred to in paragraph 624 of the present tariff, be maintained on the free list and that no change be made in the present rate of three-eighths of 1 per cent per pound on sumac extract.

FORMALDEHYDE.

[Paragraph 32.]

Mr. RIGNEY. I have one other matter, and that is formaldehyde and its derivatives. It has been gone over very carefully and reported by the Tariff Commission, but I would like to file a brief, so that my position will be made clear to the committee. I also have a brief on the cyanide salts.

BRIEF OF THE PERTH AMBOY CHEMICAL WORKS, NEW YORK CITY.

SIR: In revising the tariff, in order to encourage and protect the formaldehyde industry in the United States, we respectfully petition that formaldehyde, 40 per cent solution, be again made dutiable at 25 per cent ad valorem: and formaldehyde preparations, such as paraformaldehyde, hexamethylenetetramine, etc., be specially provided for at 33⅓ per cent ad valorem.

Formaldehyde is sold in commerce as an aqueous solution of formaldehyde gas, and solid as paraformaldehyde. It is produced by the partial oxidation of refined methyl alcohol which in turn is obtained by the destructive distillation of hardwoods, chiefly beech, birch, and maple.

United States Production—Census Reports.

[Formaldehyde solutions 40 per cent not formaldehyde preparations.]

Year.	Producers.	Quantity.	Value.	Value per pound.
		Pounds.		*Cents.*
1909	3	3,794,486	$363,717	9.585
1914	3	8,426,247	655,174	7.775
1919	6	[1] 12,000,000–15,000,000		19.000

[1] Estimated.

The price of formaldehyde and its preparations is dependent upon the price of wood alcohol. The price of the wood alcohol is regulated by the price which the wood alcohol producers obtain for the by-products, namely acetone, charcoal and acetate of lime.

The apparatus for the production of formaldehyde consists chiefly of large expensive copper stills and fittings, etc., requiring a greater investment of capital than other chemical industries, affecting overhead charges, such as interest, insurance and depreciation.

The formaldehyde industry in the United States dates from about the year 1903, at which time this company erected a plant for the manufacture of formaldehyde at Perth Amboy, N. J. This plant, with the growing demand, has largely increased. In 1909 there were three and today there are nine manufacturers of formaldehyde in the United States.

Prior to 1900, the consumption of Formaldehyde was dependent almost entirely upon its properties as a disinfecting and fumigating agent. At present formaldehyde is used chiefly as a raw material in other manufacturing industries, as follows:

1. The manufacture of synthetic coal tar dyes, especially artificial indigo.
2. The manufacture of electrical insulation for the ignition systems of automobiles, motor boats and aeroplanes.
3. The manufacture of rubber tires for automobiles and trucks.
4. The finishing of paper and textiles, and new uses are constantly developing.

Due to the war large quantities of formaldehyde were exported from the United States to France, England, Italy, etc., to wit:

During 1917, valued at $394,609; 1918, $866,308; and 1919, $1,270,797.

While it is hoped that these exports will continue, it is questionable whether we can compete for the foreign trade, in face of the cheaper labor costs in Germany, Sweden, and other countries.

UNITED STATES TARIFF HISTORY.

Act of 1909. Paragraph 3—n. o. p. f.: Formaldehyde 40 per cent solution; paraformaldehyde. Both 25 per cent ad valorem. Raw material, paragraph 480—n. o. p. f.: Wood alcohol—Crude, 10 per cent ad valorem; refined, 20 per cent ad valorem.

Act of 1913. Paragraph 32: Formaldehyde, 1 cent per pound specific (equal to 12½ per cent ad valorem). Paragraph 5. Paraformaldehyde (as a chemical compound) 15 per cent ad valorem. Raw material, paragraph 393—Wood alcohol, both crude and refined, duty free.

Foreign competition: Canada, central European countries, and Sweden. Canadian competition is most to be feared for the reason that this neighbor has vast and untouched hardwood resources from which they can produce all the wood alcohol necessary for an increased production of formaldehyde.

According to statistics so far available, Canada during 1920, for the first time commenced to export their surplus production of formaldehyde to the United States.

Canadian exports to United States and duty collected.

1920	Quantity.	Declared value.	Value per pound.	Duty collected at 1 cent per pound.
	Pounds.		*Cents.*	
Jan. 1–Mar. 31	109,200	$53,130.00	48.7	$1,092.00
Apr. 1–June 30	86,338	39,772.00	46.0	863.38
Total	195,538	92,902.00	.....	1,955.38

At 25 per cent ad valorem the duty would have been equal to $23,225.50.

These Canadian exports if not checked will be a serious menace to the United States formaldehyde industry as our customs laws have no adequate "dumping" provision, and we are debarred from selling formaldehyde to Canada on account of their import duty of 25 per cent ad valorem on this product.

The central European countries, more particularly Austria-Hungary, prior to the war produced a very considerable quantity of both wood alcohol and formaldehyde, for which Germany offered a ready market for the production of synthetic coal-tar dyes. So far as known, that part of their forests, producing the hardwoods, were not destroyed.

Sweden took up the production of formaldehyde from wood alcohol in 1913, and with their wood resources are likely to expand further along this line during peace times, and with a low rate of duty would be encouraged to export to the United States.

Japan has also taken up the manufacture of formaldehyde and are shaping their tariff to protect this new industry.

If the formaldehyde industry is to be protected in the United States, the import duty thereon must equal, if not exceed, the duty imposed by Canada, our nearest and most aggressive competitor.

In view of the readjustment period we are now passing through, it is impossible at this time to make any comparisons as to the domestic and foreign production cost, wages, etc. It may be years before conditions become normal again, and we must therefore count on higher cost of raw materials, packing, labor, freight, and overhead charges (income taxes) than those which prevailed prior to the war.

It therefore is not unreasonable to petition that formaldehyde 40 per cent solution be again made dutiable at 25 per cent ad valorem, and formaldehyde preparations, such as paraformaldehyde, hexamethylenetetramine, etc., be specially provided for at 33⅓ per cent ad valorem.

LOUIS RUHL, *Secretary.*

BRIEF OF THE NORWELL CHEMICAL CORPORATION, PERTH AMBOY, N. J.

FORMALDEHYDE—HEXAMETHYLENETETRAMINE—PARAFORMALDEHYDE.

We respectfully recommend that this paragraph be revised to read:

"Formaldehyde solution containing not more than 40 per cent of formaldehyde, or formaline, 25 per cent ad valorem; hexamethylenetetramine, 33⅓ per cent ad valorem; paraformaldehyde 33⅓ per cent ad valorem."

The present tariff on formaldehyde solution is 1 per cent per pound, while hexamethylenetetramine and paraformaldehyde are dutiable at 15 per cent ad valorem under paragraph 5. This is not sufficient to protect the American manufacturer against importations below his cost of production. During the first six months of 1920 there was imported into the United States 195,538 pounds of formaldehyde of Canadian manufacture. Formaldehyde is also produced in Scandinavia, Germany, Austria, and Japan, and can be produced wherever there is plenty of hard wood available, as the raw material, wood alcohol, is obtained by the destructive distillation of hard wood.

For the production of formaldehyde there is required a heavy investment of specially constructed copper apparatus. Our foreign competitors, owing to lower cost of skilled metal workers familiar with the construction of chemical apparatus, can build their plants much cheaper than we can, and in fact most of them have their plants on hand from before the war, with the original investment charged off.

Hexamethylenetetramine and paraformaldehyde are manufactured from formaldehyde, and each require additional expensive apparatus as well as additional labor to produce.

Formaldehyde is being required in additional quantities, owing to its increased use for purposes formerly known and because within the last few years many new uses for it in the arts have been discovered.

The principal uses are:

1. For disinfecting and fumigating. Increased knowledge of public health requirements has caused a steadily increased use. It is also important that there be kept on hand large available stocks for emergency supplies in case of disasters, such as epidemics, earthquakes, and the like, where the common agencies of sanitation break down.
2. For treating seed grain to prevent rust and various blights affecting crops.
3. For the manufacture of synthetic resins, which are used in insulating varnishes and in the manufacture of insulators for electric work and phonograph disks, in many cases being an improvement on hard rubber for these purposes.
4. In the manufacture of soft rubber goods, such as automobile tires, etc.
5. In connection with the dyeing industry, especially with indigo, the most important of the dyes.
6. Other uses in connection with the printing of textiles have developed, and still further industrial uses are expected.

Hexamethylenetetramine is used medicinally in bronchial ailments and kidney affections. It is sometimes known by the trade name "Urotropin." It is also used in the rubber industry.

Paraformaldehyde is principally used in the manufacture of fumigating candles.

The rate of 25 per cent ad valorem that we ask for formaldehyde is the same as that levied under the tariff of 1909. The rate of 33⅓ per cent ad valorem on its derivatives offers only a slight protection on the expense and overhead necessary to make them from formaldehyde.

GLUE AND GELATIN.

[Paragraph 34.]

ALBERT C. JACOBS, PRESIDENT NATIONAL ASSOCIATION OF GLUE AND GELATIN MANUFACTURERS.

Mr. JACOBS. I am a manufacturer of glue, also president of the National Association of Glue and Gelatin Manufacturers.

BRIEF OF THE NATIONAL ASSOCIATION OF GLUE AND GELATIN MANUFACTURERS.

DEAR SIR: I represent the National Association of Glue and Gelatin Manufacturers, of which I am president, and wish to be heard in reference to paragraph 34, section A, of the present tariff act.

The National Association of Glue and Gelatin Manufacturers, an association composed of glue and gelatin manufacturers of the United States, organized for the purpose of looking after the general welfare of the industry, and not a trust or combination of any kind whatsoever, and representing approximately 87½ per cent of the glue and gelatin produced in the United States, respectfully suggests and recommends the following paragraph as a substitute for paragraph 34, section A, of the present tariff act:

"Glue, fish glue, and glue size, and all fish bladders and fish sounds, other than crude or dried or salted for preservation only, valued at not above 12 cents per pound, 4 cents per pound: glue and agar-agar or Japanese isinglass, valued at above 12 cents per pound and not above 35 cents per pound, 35 per cent ad valorem: glue valued at above 35 cents per pound, and all gelatin and gelatin emulsions, 15 cents per pound and 30 per cent ad valorem; all manufactures of gelatin, or of which gelatin is the component material of chief value, not specially provided for in this section, 45 per cent ad valorem."

Our reasons for making these recommendations are as follows:

(1) The average price of glue at the time of the operation of the Payne-Aldrich bill was less than half what it is to-day. The first bracket of this bill granted a minimum duty of 25 per cent. We are asking a minimum duty of 33⅓ per cent, which, under the circumstances, we consider a very slight increase.

The production cost of glue to-day is higher than at any time since the period immediately following the Civil War. It is 50 per cent over the average selling price of 8 or 10 years ago, or during the life of the Payne-Aldrich bill.

The present rate of foreign exchange is very much to the advantage of the foreign manufacturer. In asking this measure of protection we are looking to the future. Under the present foreign exchange conditions and present production costs this proposed tariff is wholly inadequate.

The proposed tariff will not prohibit importation and thereby cut off a source of revenue. If the imports fell to one-quarter of the volume under the present bill the revenue under the proposed bill would be the same.

(2) The glue industry is an extremely important one, due to the fact that glue enters either directly or indirectly into the production of most of the articles manufactured in this country. The production of glue and gelatin in this country to-day amounts approximately to $35,000,000.

The industries employ about 4,000 people. Most of the glue and gelatin is made in the States of Illinois, Massachusetts, Pennsylvania, Wisconsin, New York, Indiana, California, New Hampshire, Ohio, Maryland, Missouri, Iowa, Nebraska, Kansas, and Michigan.

The consumption of gelatin as a food product has increased enormously in the last 10 years.

Notwithstanding the almost universal use of glue, its cost in any manufactured article is so small that any increase or decrease in its price would not affect the price of the article materially to the ultimate consumer.

Without this measure of protection we will face the possibility of curtailing our production, necessitating the laying off of labor and the lowering of wages. If we are granted this protection we feel that we will be able to operate our factories to normal capacity and pay wages that will enable our workmen to live up to the American standard of living.

We also respectfully call your attention to the fact that in the manufacture of glue and gelatin there is produced throughout the United States, as a by-product, an immense quantity of nitrogenous and phosphatic material, available and used for land fertilizing purposes. Any tariff law adopted that will affect adversely the glue and gelatin industry in this country will tend to deprive the farmers of the United States of many thousand tons of most excellent and largely needed animal matter fertilizers, now procurable at a low cost.

(3) In this country the average rate of unskilled labor is 50 cents per hour at the present time. According to our latest and best information, the average wage for all labor is the glue factories in continental Europe is between 6 and 8 cents an hour, in our money.

We desire also to call to your attention the fact that we are concerned with conditions in the industry abroad which our laws in this country do not permit. There is in existence at the present time both European and international syndicates in the glue and gelatin business.

The operations of the European trusts, and especially the German, or the largest one, which controls practically all of the factories in middle Europe and which formerly was the greatest offender in using this country as a dumping ground, is now endeavoring to broaden its influence by competitive agreements with glue and gelatin combinations existing in other countries.

These trusts control the purchase and distribution of the supply of raw material and the price and distribution of the finished product in Europe, and the capacity of these European factories is far in excess of their home consumption.

The importations of glue during the period from October 1, 1912, to October 3, 1913, were, according to our Government records, 6,431,553 pounds, of which the German trust supplied over 37 per cent. During the next 12 months, which was the first year of the operation of the present tariff, the importations of glue were 23,714,107 pounds, of which the German trust supplied over 55 per cent. This period included but 10 months of normal operations, as the European war started on August 1, 1914, and practically stopped importations.

(4) The principal importations of glue and gelatin come from Germany, France, England, Italy, Belgium, Holland, Austria, Czechoslovakia, Switzerland, and South America.

(5) In an endeavor to clarify the situation as to gelatin particularly, we have eliminated the word "gelatin" from the first and second brackets of the present tariff, and have used it in the third bracket of our proposed tariff.

We are asking for a duty on all gelatin of 30 per cent ad valorem and 15 cents per pound, because the operation of the pure food laws has imposed certain exacting requirements upon the American gelatin maker, which have resulted in a greatly increased manufacturing cost, while the European manufacturer does not have to comply with similar requirements in his own country. Furthermore, the labor cost in the production of gelatin is from two to five times that of glue.

ALBERT C. JACOBS, *President*.

The CHAIRMAN. You are afraid of competition from Germany?

Mr. JACOBS. Largely, sir.

The CHAIRMAN. That is the competition that everybody else seems to fear.

Mr. JACOBS. It seems so.

Mr. RAINEY. I remember that when we were discussing the Underwood bill everybody on this schedule and every other schedule was afraid of German competition. That was in 1913.

Mr. JACOBS. We certainly had every reason to.

Mr. RAINEY. Since that time we have licked the Germans, but all of you gentlemen come back here frightened by the Germans, after we have killed 3,000,000 of them.

Mr. JACOBS. We licked them on the field of battle, but we do not like to have them whip us in business.

Mr. RAINEY. I wonder how we ever had enough courage to go to war with Germany.

Mr. GREEN. We have to give the Canadians credit for helping lick Germany.

Mr. COLLIER. Were you in the glue business in 1912?

Mr. JACOBS. Yes, sir.

Mr. COLLIER. You spoke of when the Underwood bill went into operation you had increased to twenty odd million.

Mr. JACOBS. Over 23,000,000 pounds.

Mr. COLLIER. What was the condition of your business before 1912? Had it fallen off or increased?

Mr. JACOBS. Our business fell off materially, sir.

Mr. COLLIER. How much?

Mr. JACOBS. I can not recall, sir; but in 1914, or a few months prior to the war, our business and the glue business of the country was at its zero hour, due to this flood of glue from Germany and other foreign countries.

Mr. RAINEY. Is there any part of the world against which we do not need protection on glue or any other industry or any product which you sell?

Mr. JACOBS. I would say, sir, if you can prevent—I think we should have a tariff or the difference in labor should be equalized by a tariff. I believe we should be protected by a tariff.

Mr. RAINEY. But none of you know what that difference is or whether there is any difference. You want a tariff on everything.

Mr. JACOBS. We certainly know there is a difference, and a vast difference, due to this great question of exchange, sir. The difference in the rate of exchange makes a vast difference in production costs.

Mr. RAINEY. That does not make a particle of difference. People have different economic theories about the difference in exchange.

The CHAIRMAN. All you ask is a tariff sufficiently high to offset the difference between your cost and your competitors' cost, so that the competitor does not have an unfair advantage of you? Is that right?

Mr. JACOBS. That is right, sir. I will add that we also fear the dumping feature in this competition. This has been done in the past, and we know it will be done again.

The CHAIRMAN. This committee, by unanimous vote, sent an antidumping bill to the House, and the House sent an antidumping bill to the Senate, and we hope the Senate will pass it.

BRIEF FOR T. M. DUCHE & SONS AND W. E. MILLER, IMPORTERS, NEW YORK CITY.

We make no request for change in classification or rate of duty for these materials, which are provided for in paragraph 34, of the present tariff act—if valued not above 10 cents per pound, 1 cent per pound duty; valued above 10 cents and not over 25 cents per pound, 15 per cent ad valorem; valued above 25 cents per pound, 25 per cent ad valorem.

We import from Belgium and France, where all of this material, which we import, is produced.

The first classification, valued under 10 cents per pound, includes what may be referred to as cheap bone glue, of which by far the greater part of the domestic production is a by-product of the packing industry in this country.

The second classification, valued from 10 cents to 25 cents per pound, covers the bulk of our importations, and which are put to various industrial uses, such as in the preparation of sizing, finishings, and high-grade adhesives.

The third classification, valued over 25 cents per pound, is chiefly consumed by the food and drug industries and also for certain technical uses, such as photographic emulsions and for transparency and display purposes, such as thearical lighting effects produced by gelatine sheets, which is a highly finished product made of gelatine.

In Summary of Tariff Information 1920, at page 55, it is stated:

"The combined import of glue and gelatine in 1914 was 13 per cent in value of the domestic production. The imports decreased to about 2,000,000 pounds in 1918. The import of gelatine prior to 1914 averaged a little over one million pounds per year. In 1914 and 1915 over 2,000,000 pounds were imported, but there was a decrease to less than 400,000 pounds in 1918.

"Exports.—The export of glue from 1910 to 1915, inclusive, averaged 2,600,000 pounds per year, increasing since to between 4,000,000 to 5,000,000 pounds. It was 1.3 per cent in value of the domestic production of glue and gelatine in 1914."

It will thus be seen that the exports of glue have increased to some 5,000,000 pounds.

From the foregoing statement it is apparent that under the existing tariff the domestic interests control more then their fair share of the consumption of this country and are also able to export and sell in competition with foreign products in other markets.

From the handbooks of information prepared for the use of the committee during the revision of the tariff in 1908, 1913, and 1920, and from the hearings before the committee during the previous revisions, it is evident that neither the packering industry or the other domestic producers, who are members of the National Association of Glue and Gelatine Manufacturers, are in any sense an infant industry which needs protection, and, therefore, the duty should be considered from the revenue standpoint and upon a competitive basis.

The importers are at a considerable disadvantage because the lack of imports during the war has forced the consumers to use the American product, which handicap the

importers will have to overcome in order to get back some of the trade which they catered to before the war, for instance, the photographic industry.

The present rates of duty prohibit sale of the imported materials to some of the maior industries, such as manufacturers of matches, furniture, and kindred lines.

The bulk of the imported materials are sold in this country in competition with the domestic product which is offered at substantially lower prices, and the only reason that the importers can obtain any business under these conditions is due to the special characteristics of imported materials which produce better results in the uses to which they are put, such as clarification, purity, strength, and particularly uniformity of production, which is maintained at a very high standard by the French and Belgian producers in respect to raw materials and processes of manufacture. Clarification is particularly important in these materials when used for sizing and finishing of light colored or delicate materials. Purity because of the absence of harmful materials and septic matter, which increases its affinity for such chemicals as may be necessarily added to it to bring it into condition for use. Strength is essential in such uses as adhesives and finishings in order to get the maximum result in durability, tensile strength, and moisture resistance. Uniformity of product is the main essential to the manufacturer of all high grade materials in the production of which our goods are used, and it is because of the high standard in this respect of out imports that we are able to obtain a share of the domestic business. The raw materials of the domestic producers are obtained from the bones and hides of their own packing industries or other similar sources by the other producers indirectly connected with the packing industry or from South America and possibly other sections of the world. The main source of supply of the products of the factories which we represent and which are located in Belgium and France is bones of animals of the bovine species from India.

Each importation coming under the third classification (valued over 25 cents per pound) which are consumed by the food and drug industries are subject to analysis by the laboratory of the Bureau of Chemistry of the Department of Agriculture located in the appraisers stores in New York and other ports as required by the food and drugs act, whereas the domestic production is supervised in a general way by periodical inspections of plants and examination of materials and products.

Our factories are operating under conditions which are extremely difficult, especially with regard to taxation, the cost of coal and other materials, and which, together with the high labor costs, have caused the costs of production in Belgium and France to now more closely approximate the costs of production in the United States.

There is another thought, which may be considered in connection with this particular industry, and that is the present industrial and financial situation in Belgium and France, which are both seeking by almost superhuman means to restore the industries which were almost completely destroyed by the invasion of their territories during the war by our common enemies.

CONCLUSIONS.

1. The importations of glue and gelatin amount to only 13 per cent of the domestic production.

2. The domestic producers, especially the packing concerns which in 1914 produced 15.7 per cent of the output of glue, the American Glue Co. and the other domestic producers are thoroughly developed, well organized concerns, and we believe, members of the National Association of Glue and Gelatin Manufacturers, which has apparently looked after the interests of its members very well for many years.

3. The importers are able to compete only because of the high standard of their product which has always been maintained, especially in the all important qualification of uniformity.

4. The loss of business owing to practical stoppage of imports during the war and the conditions in France and Belgium are serious handicaps, which the importers must first overcome in order to regain the 15 per cent of the domestic trade which they previously maintained.

GLYCERIN.

[Paragraph 35.]

BRIEF OF HARSHAW, FULLER & GOODWIN CO., CLEVELAND, OHIO.

REFINED GLYCERIN.

We are refiners of glycerin. We operate two refineries, one is located at Philadelphia, Pa., the other at Elyria, Ohio. Our raw material is crude glycerin of various kinds. At present there is a duty of 1 cent per pound on glycerin, crude, not purified.

If the duty on crude glycerin should be increased, then we would desire a corresponding compensating increase in the duty on refined glycerin. The present duty on refined glycerin is 2 cents per pound, under paragraph 35. The differential of 1 cent per pound between crude and refined glycerin is insufficient, and we respectfully ask that it be increased to 2 cents per pound.

W. A. HARSHAW, *President.*

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

CRUDE AND REFINED GLYCERIN.

War requirements practically stopped the importation of crude glycerin in the United States, as it was greatly needed in the respective countries of production for the manufacture of explosives. The importation, from about 36,500,000 pounds in fiscal year 1914, dwindled to a mere 1,171,679 pounds in 1919. With the return of peace it is picking up again, with 15,656,463 pounds in 1920, and this raw material, imported for refinery, is again finding in a finished condition constructive uses in mechanical applications, in the manufacture of leather and tobacco, in printing and dyeing, but above all in the manufacture of medicinal and toilet preparations. Its use in the preparation of beverages and especially of flavoring extracts is also increasing since the enactment of prohibition.

The importation of crude glycerin of a raw material integrant of American industry, should be encouraged especially under present reduced output, through shortage of fats of the soap industry, of which glycerin is a by-product, and its present duty of 1 cent per pound (imposed for revenue purposes years ago, when crude glycerin was taken off the free list), should remain unchanged and likewise that of 2 cents per pound on refined glycerin, which is sufficiently protective to American refiners, as the cost of fuel and machinery, the principal factors in the refinery of glycerin, is lower in this country than abroad.

This chamber therefore respectfully recommends that the rates on glycerin, both crude and refined, remain as they are at present.

STARCH.

[Paragraph 36.]

JOSEPH MORNINGSTAR, OF JOSEPH MORNINGSTAR & CO. (INC.), NEW YORK CITY.

Mr. MORNINGSTAR. Mr. Chairman, I have not got my brief ready, but I would like to submit some facts covering the starch industry in the United States that I think may be of interest.

I will state our position briefly in coming before you. We advocate that the duty on potato starch of a cent a pound be removed, and that tapioca starch and cassava flour should be placed on the free list provided potato starch is made nondutiable; otherwise an equal duty should be imposed on tapioca; and that the duty on imported dextrines should be lowered to ½ cent a pound. It is now 1¼ cents; and that the duty on other starches and other starch products should be kept the same.

The CHAIRMAN. Are you a manufacturer of starch?

Mr. MORNINGSTAR. No, sir; we are not. We are importers and dealers.

In the United States the main industry is the manufacture of cornstarch. You undoubtedly have figures covering the extent of this industry; but the best history of the case could probably be gotten from the case of the United States *v.* Corn Products Refining Co., (233 Fed., 964).

The next most important domestic starch is potato starch. We can say roughly that nine-tenths of the potato starch is manufactured

in the State of Maine, Aroostook County, centering around the towns of Caribou and Presque Isle.

This industry has never been developed, and is crude as compared with Germany. So-called factories are isolated sheds which are located generally on streams to carry off the refuse, and the site for their erection is generally chosen for this feature alone. The quality of the starch is very poor and as a matter of fact can not compete in quality with foreign potato starches. It is poor in color, and shows a high percentage of moisture, and is entirely lacking in uniformity.

The CHAIRMAN. Why is it poor starch? Are potatoes raised in the State of Maine poorer in quality than they are in Germany?

Mr. MORNINGSTAR. The reason for that, Mr. Chairman, is this: That the potato starch in this country is made entirely from culls and seconds. No potatoes are grown for the manufacture of starch. When they have a rotton crop in Maine the starch factories are busy. When they have a sound crop the starch factories are closed.

The CHAIRMAN. They do not make starch except when they have rotton potatoes?

Mr. MORNINGSTAR. No, they make some starch, but the size of the crop depends largely on how sound the crop is in Aroostook County.

Mr. GARNER. How large is the importation into this country compared with the production of potato starch?

Mr. MORNINGSTAR. The production of potato starch in this country I should say would average about not more than 5,000 tons over a period of five or ten years.

Mr. GARNER. How much is the import?

Mr. MORNINGSTAR. The import varies from 10,000 to 20,000 tons

Mr. GARNER. In other words, the percentage of imports compared with the production is, say, 80 or 90 per cent to 10 per cent production?

Mr. MORNINGSTAR. Very nearly that.

Mr. GARNER. It would be a fine thing to get revenue into the Treasury, would it not?

Mr. MORNINGSTAR. Yes, sir; but I will say this, and I think that I can say it safely, that if the duty on potato starch were lowered to half that amount you would get twice as much revenue.

Mr. GARNER. If you would lower it to half the amount, say one-half of a cent instead of a cent a pound——

Mr. MORNINGSTAR. Yes.

Mr. GARNER. You would get twice as much revenue?

Mr. MORNINGSTAR. Yes.

Mr. GARNER. Well, how do you figure that when you now import 80 to 90 per cent?

Mr. MORNINGSTAR. Because you would import a good deal more.

Mr. GARNER. You are importing now from 80 to 90 per cent of the consumption of this country.

Mr. MORNINGSTAR. Yes, sir.

Mr. GARNER. You are charging 1 cent a pound.

Mr. MORNINGSTAR. Yes, sir.

Mr. GARNER. If you put it at one-half a cent a pound you would import twice that amount?

Mr. MORNINGSTAR. Yes, sir.

Mr. GARNER. Will the people use more starch?

Mr. MORNINGSTAR. Yes, sir.

Mr. GARNER. I would like to hear the Tariff Commission say something on that.

Mr. TREADWAY. What would happen to the industry in question if you take off that duty of 1 cent?

Mr. MORNINGSTAR. I believe it would be very beneficial. The Maine potato starch can not compete in quality at the present time with imported starches.

Mr. TREADWAY. It is a comparatively new industry there, is it not?

Mr. MORNINGSTAR. No, sir; it goes back to colonial days.

Mr. GREEN. When you prepare your brief you had better revise your figures about the production of potato starch in this country. I think you will find about 23,000,000 pounds made in 1914.

Mr. MORNINGSTAR. No, sir; you will find I think that the average crop for this country over a period of 5 to 10 years will not be much in excess of 5,000 tons. The use of potato starch in this country is growing less and less each year.

Mr. TREADWAY. I would like to hear the gentleman's idea as to how it would benefit the starch makers to take the tariff off.

The CHAIRMAN. They would be better off out of the business according to his statement.

Mr. MORNINGSTAR. In this respect, if the use of potato starch in this country should jump from 20,000 tons to 50,000 tons, it would encourage somebody to go up to one of the big producing counties and put some money into this industry. I believe you could buy the whole blooming shooting match up in Caribou for less than around a quarter of a million dollars. I don't believe there are 50 men employed in the county of Aroostook all the year around in the manufacture of potato starch. Outside of Aroostook County, in Maine, there are a few sporadic plants through Michigan and Wisconsin and Minnesota. In other words, what is happening is this: By this duty on potato starch you are placing a tax on the consumer, because enough potato starch is not made in this country of good quality to go all the way around. You can not make good potato starch in this country until you get a good source of raw material. There is not any fixed source of raw material for making potato starch, compared with Germany and Holland, where the law regulates the kind of potato that shall go into the starch, where the starch potato can not go on your table, and the table potato can not go into the starch factory, where they have the rotation of crops provided by law. They have an entirely different state of affairs there, which accounts for the difference in the quality.

The CHAIRMAN. How much potato starch did you say we produce in this country annually?

MR. MORNINGSTAR. It averages about 5,000 tons.

The CHAIRMAN. Ten million pounds?

Mr. MORNINGSTAR. Yes, sir.

The CHAIRMAN. You are sure your figures are correct?

Mr. MORNINGSTAR. Yes; I am very nearly correct.

The CHAIRMAN. Let me call your attention to the fact that in 1914 the report shows that 23,540,000 pounds were made in the United States, that is potato starch.

Mr. HAWLEY. In the next column it says the average from 1914 to 1918 was 15,143,778 pounds.

The CHAIRMAN. Yes; but they had something else to do with potatoes than to make starch with them. That was during the war.

Mr. MORNINGSTAR. No; the crop of eatable potatoes has nothing to do with the manufacture of starch.

The CHAIRMAN. Why did the production drop off from 23,000,000 to 15,000,000; and you say it was only 5,000,000?

Mr. MORNINGSTAR. I said 5,000 tons.

The CHAIRMAN. Ten million pounds.

Mr. MORNINGSTAR. Ten million pounds.

The CHAIRMAN. You did not come very close to it, the difference between 10,000,000 and 23,000,000.

Mr. LONGWORTH. Would you think it scientific to put a comparatively high duty on potatoes, and to put potato starch on the free list? Or are you basing your argument on the fact that potatoes are now on the free list or will be until the Fordney-Garner bill passes?

Mr. MORNINGSTAR. No, sir.

The CHAIRMAN. You are not producing starch in this country. You are an importer of starch?

Mr. MORNINGSTAR. I am.

The CHAIRMAN. That is all.

Mr. TREADWAY. Do you expect to increase the consumption of starch in this country at the rate you speak of by reducing the tariff?

Mr. MORNINGSTAR. Yes, sir.

Mr. TREADWAY. What will cause the people to consume more?

Mr. MORNINGSTAR. At the present time the big competitor of potato starch in this country is corn starch.

Mr. TREADWAY. That is for eatable purposes?

Mr. MORNINGSTAR. No, sir, in the textile trade. Potato starch can sell at practically a cent a pound above corn starch and still compete with it because in slashing and in sizing in the textile mills you can use anywhere from half to 75 per cent of potato starch by weight as compared with corn starch. When you get the price of potato starch away above that ratio, the manufacturer drops the use of potato and turns to thin boiling corn starches and other cheaper imported starches.

The CHAIRMAN. Would that affect the corn-starch business?

Mr. MORNINGSTAR. It would undoubtedly, yes, sir.

The CHAIRMAN. It would increase the potato starch and decrease the corn starch?

Mr. MORNINGSTAR. Right.

Mr. GARNER. Is there a duty on corn starch now?

Mr. MORNINGSTAR. Yes, sir, but no corn starch is imported. But, on the other hand, in fostering the potato industry in this country, it seems very clear that the corn-starch industry needs very little protection.

The CHAIRMAN. Are manufacturers of corn starch also manufacturers of potato starch?

Mr. MORNINGSTAR. No, sir.

The CHAIRMAN. Who are the manufacturers of corn starch largely?

Mr. MORNINGSTAR. Of corn starch?

The CHAIRMAN. Yes.

Mr. MORNINGSTAR. The Corn Products Refining Co.

The CHAIRMAN. That is the Standard Oil Co., is it not?

Mr. MORNINGSTAR. Yes, sir. They practically control the industry. They set the price and the independents set their price accordingly.

The CHAIRMAN. Potato starch is made by whom?

Mr. MORNINGSTAR. Potato starch is made by farmers and lumbermen mostly.

Here is another point that I would like to bring before the committee, and that is this: If the potato starch industry in this country or potato-products industry in this country were fostered, there are quite a number of other products that could be made from the potato which we do not know about. We produce more potatoes in this country than in any country in the world, but we have absolutely no industry for potato by-products. I have been in factories in Holland and in Germany where they are producing from the potato besides the potato starch, potato meal, which corresponds very much to our corn meal, potato glucose, potato alcohol, potato dextrine, potato cattle feeds, grape sugars, and a list of potato desiccated products.

The CHAIRMAN. Mr. Morningstar, you are not speaking in the interest of the American laboring man or of capital invested. You are speaking in the interest of the importer, are you?

Mr. MORNINGSTAR. That is not so, sir. I believe——

The CHAIRMAN. Are you a producer?

Mr. MORNINGSTAR. No, sir.

The CHAIRMAN. You are an importer?

Mr. MORNINGSTAR. Yes, sir.

The CHAIRMAN. Now, you are not speaking for the laboring man.

Mr. MORNINGSTAR. As a matter of fact, the labor that enters into the manufacture of starch is insignificant.

The CHAIRMAN. Doesn't it take labor to make starches from potatoes?

Mr. MORNINGSTAR. Very little. It is a very small percentage. It is a very simple process. I have some microscopic photographs here showing just how that thing is done.

The CHAIRMAN. Do you believe that starch can be made in this country under free trade?

Mr. MORNINGSTAR. I certainly do, provided you had a good source of supply for raw material and a wider application for the finished product.

The CHAIRMAN. Have we not more potatoes in the United States than are produced in any other country in the world?

Mr. MORNINGSTAR. Yes, sir.

The CHAIRMAN. Have we not got more corn than is produced in any other country in the world?

Mr. MORNINGSTAR. Yes, sir.

The CHAIRMAN. Yet we have not got the raw material to produce starch?

Mr. MORNINGSTAR. You are exactly right, on potato starch you have not.

The CHAIRMAN. We produce more corn than any other country, and we can produce more potatoes than can be produced anywhere else, but in other words we have not got the raw material to make the starch.

Mr. MORNINGSTAR. I did not say that. On cornstarch there is unquestionably raw material to make all the cornstarch for the

next 500 years, no question about that. I am speaking about potato starch.

I mean to say while we produce more potatoes than any country in the world, we produce a very small yield per acre. I believe in Germany, for instance, and in Holland, they produce twice as many bushels of potatoes per acre as compared with the United States, while in volume we have a greater production of potatoes.

Mr. TREADWAY. I understand that in Germany there is a regular grade of potatoes used for potato starch?

Mr. MORNINGSTAR. Yes, sir.

Mr. TREADWAY. Whereas in this country your claim is that there are no potatoes raised for starch whatever?

Mr. MORNINGSTAR. That is right.

Mr. TREADWAY. They are simply culls or poor species of potatoes that can not be used for household purposes?

Mr. MORNINGSTAR. Yes, sir.

Mr. TREADWAY. That, therefore, the product itself is very poor in this country?

Mr. MORNINGSTAR. Exactly, sir.

Mr. TREADWAY. I am not from Maine, but I am disposed to think that some of my Maine friends would take exception to that testimony.

Mr. MORNINGSTAR. It is a scientific proposition. There is no question about it, and you can see that if you follow it down.

The CHAIRMAN. There is no question in your mind about it?

Mr. MORNINGSTAR. There is absolutely no question in my mind. I have been all through the Maine district.

The CHAIRMAN. There is no question in your mind, but there is some question in my mind.

Mr. MORNINGSTAR. Do I understand you to say, Mr. Chairman, that potatoes are raised in this country for starch?

The CHAIRMAN. Why, potatoes are raised in greater quantity, high grade and low grade—why, they go to waste. You can feed them to the hogs. I have fed potatoes to hogs in the State of Michigan and then sold the hogs for 2½ cents a pound.

Mr. MORNINGSTAR. Yes, I know that is all very well; but how could potato starch made in Michigan compete with potato starch made in Aroostook County when you have to ship it half way across the country to get into the textile territory?

The CHAIRMAN. I am not in the business and I could not tell you. I do know this, that we produce this raw material to compete with any other country in the world scientifically, if we could only have the same labor costs here that they have abroad.

Mr. MORNINGSTAR. I believe if you would look a little closer into the manufacture of starch and the labor involved in the manufacture of starch that you would see that it is an insignificant item. I also beg to call your attention to the fact that if the average starch manufacturer in the United States had to carry the overhead that a German factory or Dutch factory carries he would close up and be closed up for the rest of the time.

Mr. TREADWAY. In order to establish more business you would take the tariff off?

Mr. MORNINGSTAR. I believe that if you could first create a big market for potato starch in the United States it would attract people

to making that product and would lead finally to the Government seeing what an important industry it is.

Mr. GARNER. What you want to do is to increase the potato-starch industry to take the place of the cornstarch industry?

Mr. MORNINGSTAR. No, sir; not necessarily.

Mr. GARNER. Would not that be the logical result of the situation?

Mr. MORNINGSTAR. No, you never could replace cornstarch.

The CHAIRMAN. We can not make starch under any conditions, according to your statement.

Mr. MORNINGSTAR. No, sir, I did not say that.

The CHAIRMAN. We will call men in the business before we get through with this hearing to see whether they agree with you.

Mr. MORNINGSTAR. Very well.

Mr. GREEN. Is there a different kind of potato raised in Germany for starch than that used for average purposes?

Mr. MORNINGSTAR. Yes.

The CHAIRMAN. Low-grade, little potatoes, that do not sell on the market?

Mr. MORNINGSTAR. If you will take the trouble to look at these small, microscopic photographs that I have here of the larger cells, showing the well-developed starch cells in the foreign starches and the many undeveloped starch cells of domestic starch, I believe that would be proof in itself. I believe if you would ask the Maine people to submit samples of their starch and let me submit samples of imported starches you would see that everything I have said is borne out to the last word.

BRIEF OF JOSEPH MORNINGSTAR & CO. (INC.), NEW YORK CITY.

I submit a brief covering the revision of tariffs on starches and dextrins, and take the liberty of calling your attention to the following facts:

We have been continuously in the starch and dextrin business since 1851 as importers, exporters, and dealers. During the existence of our firm we have come in touch with every starch and starch product that is commercially known.

In considering the relative importance of the domestic potato starch industry, it is necessary first to see its place and its value as compared with other starches, both of domestic manufacture and of foreign origin, which are commercially employed in this country.

By far the largest industry given over to the manufacture of starch and starch products is that which obtains these products from corn. It is hardly necessary to dwell upon the growth and importance of that industry, but for reference we suggest that you read the decision of Mr. Justice Hand, of the southern district of New York, in case of United States *v.* Corn Products Refining Co. (234 Fed. Rep., 964; 249 U. S., 621).

The most important factor in the corn products market is the Corn Products Refining Co., whose sphere of influence is not limited to the United States but is gradually spreading over the entire world. We call your attention to recent newspaper advices which state that this concern is negotiating for the erection of plants in England, France, and Germany, not for the manufacture of corn starch itself, but for various products made from corn starch, particularly glucose or corn sirup. The "spread" of the corn products industry covers 30 different items, among which, in addition to the starch as commonly used, there are thin boiling starches, dextrins, glucose, corn oil, cattle feeds, and many others.

Corn starch is used for numerous purposes, the principal outlets being for food and as a sizing and finishing material in the textile industry. This industry of course has an abundant and uniform source of supply of raw material and often imports corn from the Argentine federation when that market is more favorable than the domestic one.

In addition to the Corn Products Refining Co. there are several independent interests manufacturing a similar line of products from corn, but we think we are safe in saying that none of them has as wide a spread of these products as the Corn Products

Refining Co. It should also be noted by your committee in regard to competitive conditions in this country that prices on all corn products are uniformly fixed by the Corn Products Refining Co. and its competitors in the same line of business.

It should also be noted that for many years corn products have sold in every free-trade market of Europe in competition with the identical starches which are imported into this country. As an illustration of this in the United Kingdom where sago flour or sago starch, a cooly manufactured product, is more widely used than in any country of the world, cornstarch has been able to meet it on competitive terms, although the Corn Products Refining Co. admitted that it comes into direct competition with corn starch.

Any tariff to protect this industry is unnecessary on the face of it. It can no longer be classified as an infant industry.

POTATO STARCH.

Nine-tenths of the potato starch manufactured in the United States is made in Aroostook County, Me., and centers around the towns of Caribou and Presque Isle. This industry is older than the corn products industry dating back to colonial days. As compared with cornstarch and other corn products the manufacture of potato starch is a very simple one. The potatoes are first washed and then put through a pulper which is nothing more than two corrugated revolving cylinders. The pulp is then run over water-spray shakers and the starch being insoluble drops to a receptacle under a shaker, the residue or pomace being washed away. The starch milk is pumped into large vats which are equipped with agitators and this milk after being stirred for sometime is then allowed to settle. This process may be repeated several times. After the starch is settled in the vats, the water is pumped off and the wet starch cake at the bottom of the vats is shoveled out and spread on trays which are carried to a drying room. This drying room is a long hall equipped with hot air blowers at either end. As soon as the starch has been dried, it is dumped into bins and packed. It is obvious from this that it involves merely a physical process in the reclamation of starch from potatoes.

Potato starch is used almost entirely in the textile field as a sizing material for warp and a finishing material for cotton goods. Its widest application is found in those mills where the finest cotton goods are made. In this way it comes into direct competition with cornstarch and despite the fact that potato starch is normally more than twice as expensive as cornstarch, it nevertheless must be used in order to get the desired tensile strength in the yarn or specific feel, weight, etc. in the finished goods.

Potato starch has never been widely used in this country as a foodstuff, although its potentialities in this line are very large. In Europe it is used more widely than cornstarch and during the war in the United States it was the favorite starch used as a wheat substitute. Just how important a food product it is considered abroad may be seen by the way Holland conserved her supply and by the fact that to this day there is an embargo on the export from Germany under a ruling that no food products may be exported. In fact it is no exaggeration to state that in Europe it plays a relatively more important part than cornstarch does in this country.

As to its worth as a foodstuff, we call your attention to the fact that Grierson states that by artificial digestion potato starch takes 20 minutes while cornstarch takes 120 minutes.

It is not our intention to go into detail as to the numerous uses for this commodity and we have mentioned the above to show just what place it holds in our industry and what its possibilities might be.

I have been in factories in Holland and Germany where products made from the potato are as numerous as those made from corn in this country and yet despite the fact that we grow more potatoes than any country in the world, we have no well-established potato products industry.

One does not have to search far to find the cause. No industry has much chance of success unless it has an abundant source of supply of raw material. When I appeared before your committee, your chairman doubted the statement that I made that no potatoes were grown in this country for the specific purpose of manufacture into starch. Notwithstanding, it is a true and well considered statement. The domestic manufacturers of starch are in almost all cases dealers or growers of potatoes, and the potatoes which find their way to the starch factory are culls, seconds, and rots. There is no relation whatsoever between the price of eating potatoes and the cost of a pound of starch. In my experience I have known of seasons where there was a large, sound crop in Maine, with very little starch obtainable, and consequently high prices. On the other hand, I have seen a short but unsound crop where eating potatoes called for very high prices, whereas starch was abundant and cheap.

The machinery used in the manufacture of potato starch to-day in this country is crude to a ridiculous degree, and there is no utilization whatsoever of by-products in the manufacture of this commodity.

In addition the make of starch is a seasonal one, running as a rule from the 1st of October to the middle of November, at which time, because of the low temperature in Aroostook County, the water without which no starch can be made freezes, and I believe to-day there are not more than two factories in Maine which are equipped to run the whole year through.

The relative importance of this industry to the State of Maine and the country at large can best be illustrated by figures compiled in the Thirteenth Census of the United States, which gives a comparative summary of this industry from 1899 to 1909 and are the last authoritative figures available.

Year.	Establishments.	Number engaged.	Firm members.	Salaried employees.	Wage earners (average).
1909	64	196	66	10	120
1904	66	202	74	21	107
1899	45	174	46	17	111

In the figures of this census published in 1910 the estimated value of all products from the State of Maine was valued at $176,000,000, of which the manufacture of starch was four-tenths of 1 per cent. Of all of the people engaged in producing these values, that proportion engaged in the manufacture of starch was two-tenths of 1 per cent and the value added by this industry was three-tenths of 1 per cent.

These figures are all the more significant when the country as a whole is viewed. Outside of Aroostook County sporadic attempts have been made to manufacture starch in other States, notably Minnesota and Wisconsin, where potatoes are abundant, but these attempts have proved universally unsuccessful, as the main market for potato starch is on the eastern coast of the United States from Maine to the Gulf.

It is no exaggeration to say that there are six times as many carload consumers of potato starch in the country as there are people employed in the entire industry.

The quality of the Maine starch is inferior in every respect to that which is imported from Europe and Japan. It is lacking in uniformity, judged by its water content, color, and strength. A good way to test this is by examination of samples which we are submitting and by a microscopic comparison of the starch cells themselves, showing a larger percentage of undeveloped cells in the domestic product than in the imported potato starch.

There has never been a sufficient production of potato starch in the United States to meet the demand. All figures compiled for the production of potato starch in the United States at best are rough estimates, and we should say that the average over a period of five years would be between 5,000 to 7,000 tons, while the total consumption of the United States is roughly estimated at 20,000 tons.[1]

The result is that a tariff of this nature acts merely as a tax on the consuming industries without benefiting the Maine industry in any way whatsoever. Perhaps I can make my point clearer by quoting the words of the late Joseph Morningstar when he appeared before your committee of the Sixtieth Congress. At that time he said:

"It is a remarkable fact that with all their protection covering decades the American manufactures consuming agricultural products such as potatoes should have so little to show in the way of scientific and mechanical progress. Too much protection has put them to sleep."

The one factor that can place the domestic production of potato starch and potato products in its proper and rightful place is the assurance of a source of supply of raw material for the manufacture. If this were possible it would attract capital and brains to the industry.

[1] Figures for the import of potato starch since 1914 can not be used as a normal criterion for this commodity. Prior to that year the United States imported all of her potato starch from Germany and Holland. Upon the outbreak of the World War German exports were cut off and Holland immediately started to preserve her starch supply by governmental regulation of export. By 1916 Holland was no longer an exporter of this starch. It was in this same year that Japan exported her first potato starch to the United States in any quantity, and since that time up to 1920 Japan has been the sole source of supply for imported potato starch. In 1918 the War Trade Board placed an embargo on the importation of potato starch and tapioca flour as they were listed as breadstuffs. This embargo was in existence for the better part of the year. The consequent disturbances to the importation of potato starch from these sources will account for the unusual fluctuations which followed.

Compare this industry with that of the corn products industry. The two grow up side by side, both deriving their products from the farm, and yet potato starch which is admittedly a superior product in the textile field and which has enormous possibilities as a foodstuff is still in a primitive condition, while its competitor has grown and flourished to such an extent that it has established outlets for its products in every civilized market of the world. One has no sure raw material supply; the other had an abundant and uniform one.

In Europe and in Japan potatoes are grown for starch and starch only. In fact, by governmental regulation, the food-starch factories are protected by their Governments in securing their raw material.

The labor involved.—From the description of the manufacture of starch, as given above, it is clear that the amount of labor involved is a very small percentage and by the use of efficient and modern methods this could be reduced even further; by these same methods a greater reclamation of starch could be obtained in the Maine industry than is at the present time. As an illustration of this, Dr. Gore, of the Department of Agriculture, Bureau of Chemistry (vegetable utilizations), analyzed the pummy or refuse which is discarded in the Maine factories. He discovered that this material contained as high as 40 per cent starch. I have been in a factory in Germany which this pummy or refuse was analyzed and shown to contain only a fraction of 1 per cent of starch and this pummy or refuse was used as a hog and cattle feed.

The comparative cost of manufacturing starch in this country, as compared with Europe, would seem to favor the American manufacturer. He has no overhead to speak of and most of the so-called factories of Aroostook County, not more than 50 in number, employ but two or three men, and this only for a period of approximately six weeks of the year. I have been in every starch factory in Aroostook County. In that time I have never seen one chemist employed or one factory laid out on scientific lines. In Europe, on the other hand, the keystone of the factory is in the laboratory, where everything is analyzed from the water to the coal employed. In no potato-starch factory that I have seen is there a filter for water, and yet the cleanliness of the water is one of the most important elements in the manufacture of starch. I can enumerate many instances of like nature.

In 1908 the Senator from Maine, the Hon. Eugene Hale, appeared before your committee and stated that if the tariff on potato starch of 1½ cents at that time was reduced it would drive the Maine manufacturer out of business. The tariff was reduced to 1 cent per pound, or 33⅓ per cent, and there is just as much starch produced in Maine as ever before.

When I appeared before your committee I advocated the abolition of the potato-starch tariff entirely, but it is obvious to me that as a matter of expediency this will not be considered. I therefore request that the potato-starch tariff be reduced to one-half cent per pound, which is the same amount placed on other starches. In making this request we urge you to balance the equities of the question— a narrow, undeveloped industry, employing but an insignificant fraction of the total wage earners of the State in which it locates itself, as compared with a consuming public which is one of the four largest industries of the United States.

The question may be raised that at this time when our Government needs all its sources of revenue increased rather than diminished, that this may not be a wise step. It is our well-considered opinion that should the tariff be reduced, as we advocate, that the consumption of starch in this country would increase and that the actual revenue that the Government would derive would increase. In other and more normal times when potato starch has been very cheap the tariff has acted as a virtual embargo, and the Government, because of its high tariff, lost hundreds of thousands of dollars in revenue. With potato starch rapidly approaching its normal price level, we believe that a duty which is equivalent to 30 to 40 per cent ad valorem is excessive and should be reduced.

SAGO FLOUR OR SAGO STARCH.

We are not importers of sago starch to any great extent. This commodity is now on the free list and we advocate its being kept there, as it has a unique place in the finishing part of the textile industry and is not competitive with potato or corn starch.

The other domestic starches are wheat, rice, and arrowroot. The production of these starches is so insignificant as to hardly warrant your committee's time and their consideration. The imported products are now taxed one-half cent per pound, and we believe this gives ample protection to the home industries.

TAPIOCA OR CASSAVA FLOUR, OR TAPIOCA OR CASSAVA STARCH.

These terms are interchangeable. This commodity is now on the free list. We are one of the largest importers of this product in the United States. Tapioca flour, as it is commonly known, is made entirely in the Island of Java, Dutch East Indies. It is a product of the cassava root. The method of manufacture is similar to that of potato starch, but the development of this industry is much further advanced than that of potato starch in the United States.

In addition to the import of the flour there are large imports of so-called pearl tapioca flour, which is nothing more than a starch product made by moistening and pressing through a screen, and flake tapioca, which is an identical product with a different physical form. These two latter commodities are often confused with tapioca flour, as it is in this form only that it appears on the table of the consuming public.

The main uses for tapioca flour are in the textile industry and in the food industry, and for the high-grade flour as a base for conversion into dextrin or gum which is used principally in the envelope and gummed-paper trade in the United States.

This starch competes with both corn starch and potato starch in many industries. In 1919 some 75,000,000 pounds of tapioca were imported into the United States. We have no accurate record of how this quantity was distributed by industries. We should say about 40 per cent of this was used as a foodstuff and the remainder divided evenly between the dextrin industry and those industries which could use corn or potato starch. One industry alone that we have specific knowledge of which used over 3,000 tons of tapioca flour normally could use potato starch and has used potato starch when this commodity has been cheaper than the imported tapioca.

In addition, many places where the tapioca starch is used as a food, both corn and potato could be used to equal advantage.

If your committee gives any credence to our argument that the best way to develop the potato-starch and potato-products industry of the United States would be by creating a wider market for potato starch and potato products, first, by a reduction in the tariff, and, secondly, by internal measures to create a source of supply of raw material, we advocate that a duty equaling that on potato starch be placed on tapioca.

If your committee regards the matter simply as a method of obtaining revenue, we suggest this commodity for taxation as a greater revenue producer than potato starch or any other starch:

No tapioca is produced in the United States, the only attempt being abortive some 20 years ago. The cost of manufacturing this starch as compared with domestic starches or foreign starches is much smaller because of the coolie labor employed.[1]

The unfortunate position of potato starch in the United States can best be seen by considering on one hand the highly developed corn products industries with numerous sources of raw material, both here and in Argentina; on the other hand, the duty-free, coolie-made tapioca starch, and potato starch between the upper and nether millstone, with a duty entirely disproportionate to the industry which it attempts to protect, as compared with the important consuming public which finds it an essential in its finished products.

DEXTRINS.

Dextrin is defined as follows:

"When starch is subjected to a high temperature or to the action of dilute acids or alkali, it is converted into a new substance, identical in composition but possessing totally different properties, being soluble in water, forming a solution which turns the plane of polarization of a luminous ray to the right, hence the name dextrin."

Dextrin in the United States is manufactured from the three important commercial starches, namely, corn, potato, and tapioca. There is less competition for these various products than the nature of the starch would indicate, as each dextrin upon conversion has totally different characteristics, suitable only for specific purposes and, while chemically are classified as one, are physically entirely separate entities.

There are some isolated instances where all three come in direct conflict with each other. There are also instances where any two of them may compete, but as a general rule there are well defined channels through which each of them finds a particular outlet. Thus corn dextrin is used mainly in the cotton-cloth printing industry and in the manufacture of the cheaper or ungrounded grades of wall paper;

[1] For many years it was a disputed question whether tapioca flour came within the purview of the tariff acts in reference to starches. In the case of Chew Hing Lung v. Wise, Collector (176 U. S.), it was decided that it did not. To-day there is no question that tapioca flour is a misnomer. It is chemically a starch as much so as corn or potato. We call to your attention also the fact that potato starch is known as potato flour in the food industries; yet potato flour has never been able to escape taxation because of the confusion in nomenclature.

and as a neutralizer for dyestuffs. Tapioca dextrin is used almost exclusively in the gummed paper trade; that is, in the manufacture of envelopes and postage stamps. Potato dextrin finds its largest outlet in the silk-finishing industry, in fixing the top colors in wall paper where corn dextrin could not possibly be used, and in the manufacture of library paste (exclusively), and in some gummed-paper work where it is more of a substitute for high-priced gum arabic (an imported article) rather than as a substitute for tapioca dextrin.

The only dextrin imported into this country is potato dextrin, and the present duty on dextrin of 1¼ cents per pound is a direct tax on the consumer without giving any particular protection to any one industry. Despite the fact that in the past all the dextrin converters of the country have favored a high tariff on imported potato dextrin, they all admit the noncompetitive element as set forth above.

We have every reason to believe that no matter what the tariff that those of our numerous customers who formerly used the imported German potato dextrin will use it again as soon as the German embargo has been lifted.

We urge a reduction of three-fourths of 1 cent per pound in the tariff on this commodity as no potato dextrin is manufactured in this country to-day from domestic potato starch for the reason that there is no domestic starch made of good enough quality suitable for conversion. All potato dextrins manufactured in this country to-day are made from imported potato starches. Should the domestic potato starch industry be ever developed to a point where a sufficiently good grade of starch is made for conversion into dextrin, there would be some object in protecting this commodity, but that unquestionably is a long way off.

In conclusion we advocate a reduction of the tariff on starches and dextrins as follows:

1. A reduction in the tariff on potato starch to one-half cent per pound.
2. The imposition of a tariff on tapioca starch equal to that of potato starch.
3. The duties on other starches to remain the same so that all imported starches will pay a tax of one-half cent per pound with the exception of sago starch or sago flour.
4. The reduction of the tariff on imported potato dextrin to three-fourths of 1 cent per pound.

JOSEPH MORNINGSTAR.

FREDERICK T. WALSH, REPRESENTING THOMAS LEYLAND & CO., READVILLE, MASS.

Mr. WALSH. The whole point at issue—I refer particularly to paragraph 36 in Schedule A and that portion in regard to dextrin made from potato starch or potato flour. The duty now is 1¼ cents per pound. This paragraph and that portion of the paragraph must necessarily be taken in connection with paragraph 234 of Schedule G, speaking of starch made from potatoes, 1 cent per pound.

The body of my argument is that the dextrin manufacturer to-day, in a sense, is on the third line. The first line is the farmer with his potatoes, the second line is the starch manufacturer with his starch, the third line is the dextrin manufacturer, and some products like soluble starch.

If the duty on starch, we will say, for instance, is 1 cent per pound and dextrin and some bodies lose in the process of conversion about 25 per cent, which they do, then the duty on dextrin should be 1¼ at least. That makes just a compensating duty and does not have any reference to the difference in cost of labor nor anything else; it is simply the duty in one case where dextrin loses 25 per cent, then whatever the duty is on potato starch then the duty on potato dextrin should be at least 25 per cent greater, in order to compensate for the duty on starch.

This was well brought out in the Sixty-third Congress in the first session and will be found in volume 50, No. 16, page 631. Representative Harrison, who is now, I think, Governor of the Philippines, in response to an amendment which was offered by Representative

Rogers, of the fifth district of Massachusetts, in regard to dextrin, took the wrong end of the argument and Representative Payne very quickly caught the error, and his remarks, a few of them, are here, which covers the matter better than I could say it myself.

If there was a quarter of a pound more starch used, or, say, a pound and a quarter of starch used, in making a pound of dextrin, then the duty on the starch used would amount to a cent and a quarter.

That is, the duty on potato starch was 1 cent.

Further, he says:

I want to say to my gentlemanly colleague that if there is a duty of a cent and a quarter paid on a pound and a quarter of starch, and it takes that to make a pound of dextrin, in order to compensate for the duty on the starch there should be at least a cent and a quarter (instead of three-fourths of a cent) on the dextrin.

That is substantially the argument, and we small manufacturers are sometimes lost sight of; and the fair rate of duty which should be applied to products which we make, wherein there is a duty placed on what is our raw materials, sometimes is forgotten.

We hear a good deal about a scientific tariff, but I prefer to look at it as a just tariff and a fair tariff. In other words, beginning at the first material, as you pass up through, natually each one should be compensated for whatever is the duty on the preceding one, or words to that effect. And I would simply, as a small manufacturer—and there are a good many of us in this country—I would ask for your kindly sympathy in considering this measure.

CHICLE.

[Paragraph 36.]

M. D. BRAMBERG, REPRESENTING THE NATIONAL ASSOCIATION OF CHEWING GUM MANUFACTURERS.

Mr. BRAMBERG. Gentlemen of the committee, I represent the National Association of Chewing Gum Manufacturers. I am secretary-treasurer of that association, which was formed during the war at the request of governmental authorities ——

Mr. GARNER (interposing). Your association was formed at the suggestion of Government authorities?

Mr. BRAMBERG. Yes. Some time ago they asked us to get together a war service committee and form an organization to represent the chewing gum industry, for that purpose.

In the first place, the duty on chicle at the present time, the United States import duty, is 15 cents per pound on crude, and the Mexican, Federal, and municipal and State taxes amount to about 30 cents. At the present time you can get chicle in New York for 65 cents per pound duty paid. About 5 cents covers the expenses of shipping it from the Mexican ports, which makes 60 cents as the price otherwise. Now, half of that price, 30 cents, is duty. In other words, the duty on the chicle as it is produced in Mexico amounts to 100 per cent. That, to our association, seems to be a little bit out of line.

The chewing gum business at the present time is in rather bad shape. We have had a number of failures in Ohio, New Jersey, and Virginia, and a number of companies passed their dividend. The others are not making any money.

The CHAIRMAN. And you want to request that there be no increase?

Mr. BRAMBERG. Yes, sir.

Mr. GARNER. Let me ask you a question——

Mr. GREEN (interposing). This gentleman only has two minutes, and I think he ought to be permitted to utilize that time as he sees fit.

Mr. GARNER. I certainly do not care to ask him any question if you don't want me to ask it. I just want to make it clear that if we take this duty off that Mexico is going to put it on, and that you will have to pay 30 cents anyway. In other words, Mexico is going to charge all that the traffic will bear.

Mr. GREEN. Well, I think you are right about that, but I think we had better let this witness take his two minutes.

Mr. BRAMBERG. That may be true, but the tariff will not bear any more. Mexico recognizes that the traffic will not bear any more, and that is why I am requesting, if I may, that this Government do the same as Mexico is doing. They are trying to cut down their rates. Their experience has been that the traffic will not bear it.

The CHAIRMAN. You set that out fully in your brief, do you?

Mr. BRAMBERG. Yes. We are up against a pretty serious situation. We must sell our goods to the consumer for 5 cents a package, because a great deal of it is broken up and sold to the children at 1 cent each. And we must put it up in five pieces to the package. We have got to put five pieces to a package, and the package must be sold at 5 cents in order to do that, otherwise the dealers could not sell these sticks at a penny apiece to the children.

And there are millions of dollars invested in wrapping machinery, otherwise the goods could not be sold at 5 cents a package under any circumstances.

We are paying now the highest import duty to-day that we have ever paid, even during the days of the high tariff, before the tariff of 1913. Before then we were paying the same import duties that we are paying to-day. In other words, we are paying as high a tariff now under a supposedly low tariff as we have ever paid. One other feature is that so far as our duties are concerned, it is purely a tariff for revenue. No chicle is produced in this country at all. We can not produce it here, owing to climatic conditions, so that a tariff on it is a tariff for revenue and is not a protective tariff.

In that connection, we wish to request a reduction to the previous tariff rate of 10 cents a pound on chicle and 20 per cent on refined or desiccated, as we call it. And if you will permit me to file a brief I will be very much obliged to you.

Mr. RAINEY. You favor the reestablishment of the Payne-Aldrich rate?

Mr. BRAMBERG. Yes.

BRIEF OF NATIONAL ASSOCIATION OF CHEWING GUM MANUFACTURERS.

GENTLEMEN: The National Association of Chewing Gum Manufacturers, an association composed of practically all of the manufacturers of gum throughout the United States, herewith presents its brief to your honorable committee, setting forth its request that the existing import duty on chicle be reduced from the present rate of 15 cents per pound on crude and 20 cents per pound on refined chicle, to 10 cents per pound on crude and 15 cents per pound on refined chicle.

The present import duty on chicle is a duty for revenue purposes only and in no sense for protection of any American producer. No chicle is or can be raised in the United States, chicle being the sap of the chico-zapote or sapodilla tree which grows only in tropical climates. Chicle is used by the manufacturers of chewing gum as a base. Considered, therefore, purely from a revenue standpoint, it is quite apparent that if the import duty is too high, it will materially interfere with the volume of business of the members of this association to a point where less revenue instead of more will be obtained. For the past 10 years an average of 8,000,000 pounds of chicle has been imported into this country, and since 1913 the income derived from this duty has been a little over $1,000,000 per annum.

The present tariff is the highest tariff that has ever been imposed upon the import of chicle into this country. In 1897, the Dingley bill for the first time imposed an import duty of 10 cents per pound on chicle. That duty continued in force for 16 years without change. The Underwood bill, therefore, imposes the highest rate of duty ever imposed upon chicle.

The gum industry in this country is now in bad shape. Business has been extremely depressed for the past few months and many members of this association are either in difficulties or in the hands of receivers. There have been failures or creditors' committees appointed for chewing gum manufacturers in Ohio, New Jersey and Virginia. Other gum manufacturers have recently passed their dividends. While it is true that one or two members of this association have made money during the year 1920, 90 or 95 per cent of the members of this association have not made money and are facing extremely difficult problems. Unless some relief from these conditions is granted, we firmly believe the result will be a diminished import of chicle and a lesser revenue to the Government. Recognizing this situation, the Mexican Government has very recently reduced Mexican taxes in some instances to the extent of 40 per cent in order to permit a freer market for its chicle.

Recently, the Canadian Government has entirely eliminated its import tax of 7½ per cent ad valorem on chicle, which is now entirely duty free in Canada, thus making it possible to manufacture chewing gum cheaper in Canada than in the United States.

The duty on chicle now collected by the United States Government and by the Mexican Government amounts almost to 100 per cent of the value of the chicle when extracted from the trees in Mexico. Chicle is gathered from the zapote trees which grow in dense tropical forests. Gangs of natives travel into these forests, establish camps, and spend the greater part of the year gathering this chicle, which is collected in canvas bags, carried to the cooking camps where it is boiled and coagulated, and then transported on mule back to the ports of shipment. After the chicle has been cooked, the transportation to the port of shipment requires an average of from 10 days to two weeks on mule back through difficult trails, and it is becoming much harder each year to bring this chicle to port of shipment as the producers must go deeper and deeper into the forests in order to secure the sap. The natives must establish these camps, carry into camp sufficient provisions for long stays, equip themselves for long periods of time and, in many cases, large advances must be made sometimes a year in advance of the time when any chicle is secured.

Chicle has recently been offered in New York at 65 cents per pound, and even less, with the United States import duty paid. Deducting the United States import duty of 15 cents per pound would make the price 50 cents per pound here in bond. Deducting the shipping expense, including insurance, and making allowance for the shrinkage in weight, averaging approximately 5 cents per pound, would leave 45 cents per pound in Mexico with the Mexican duties and other Mexican taxes paid. The Mexican taxes—Federal, State, and municipal—amount to about 15 cents United States currency per pound. This would leave only 30 cents per pound for chicle delivered at Campeche and Laguna, Mexico, ready for shipment. This situation, therefore, not only imposes a charge of approximately 100 per cent to cover Mexican and United States taxes, but brings the price of chicle so low that it will not pay the natives to gather it from the forests.

On the other hand, the manufacturer of chewing gum in this country is limited in the price at which he sells his product, because long custom and long business experience have demonstrated that 5 cents a package to the consumer is a standard price which can not be increased without materially cutting off consumption. Large quantities of chewing gum are sold to school children at 1 cent a stick (there being five sticks in each package). To increase the price to the consumer would mean an increase from 1 cent to 2 cents a stick, and this would unquestionably greatly restrict sales in addition to the natural falling off which has taken place along with the general shrinkage of business in this country. In addition to working under the disadvantage of a fixed selling price to the consumer, the chewing gum industry is now burdened with a special excise tax imposed by the war-revenue laws over and above

the taxes imposed on the average run of business. The chewing gum manufacturer likewise pays import duties on sugar and flavors used in his business.

For the foregoing reasons, it is the belief of our association that to reduce the import duty on crude chicle to 10 cents a pound and on refined chicle to 15 cents a pound will not effect any substantial decrease in the revenues of the United States Government and will greatly strengthen and protect the chewing gum industry in the United States.

M. D. BROMBERG, *Secretary*.

IODIDES.

[Paragraph 83.]

BRIEF OF McKESSON & ROBBINS (INC.), NEW YORK CITY.

We are large manufacturers of these various preparations, and desire to respectfully submit for your consideration the following:

Japan has become a serious competitor in the manufacture of preparations of iodine, and by reason of the low wages, low exchange, and the fact that they have the crude material within their own country, they are enabled to sell these preparations at a lower price than the manufacturers here can quote.

There are two sources of supply of the iodine. One is Chile, and the other, Japan. The special grade of carbonate of potash necessary to combine with iodine to make iodide of potash is produced only in a small way in the United States.

Potassium iodide is a product of vital importance in the treatment of blood diseases, and a continuous dependable source of supply should be continued in the United States. The goods can only be made in small batches and under the supervision of skilled chemists. Extreme care is absolutely necessary. Otherwise, impure products would result.

The machinery and apparatus for the production of these products can be used for no other purpose, and the labor cost is about 20 per cent of the total manufacturing cost.

Iodoform and potassium iodide are dutiable under the tariff act of 1913 at 15 cents per pound under paragraph 38. This duty of 15 cents per pound which is about 7 per cent at the present value, is not sufficient to equalize the difference in the cost of production of these goods in America and in Japan, where in the latter country, as stated, the manufacturers have both potash and iodine in almost unlimited quantities.

We therefore recommend that the duty on iodoform and potassium iodide be increased to 33⅓ per cent ad valorem.

Should the Government assess duty on the crude material from which these iodides are manufactured, an additional increase on the finished product, at least equal to that on the crude, should prevail.

LICORICE ROOT AND EXTRACT.

[Paragraphs 39 and 40.]

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

No licorice root is produced in the United States. This raw material is imported entirely from Asia Minor, southern Russia and other countries of southern Europe. In normal times this country needs a yearly average of 100,000,000 pounds of licorice root, but the war has interfered with its supply reducing importations in fiscal year 1918 to only 27,000,000 pounds. With 48,000,000 pounds import in 1920 it has shown a tendency to recover, but the supply is still inadequate. Licorice paste or extract has a wide range of uses but 95 per cent of it is consumed in the manufacture of tobacco, of which it is an important factor. Identified as it is with the prosperity of an important American industry, in which it pays moreover internal-revenue taxes as tobacco, and with the manufacture of a variety of articles of therapeutic value, the supply of licorice root from which it is manufactured, should not be made more difficult than it is by levying any higher rate of duty than the present. It should be noted that licorice root used to be not very long ago in the free list.

Licorice extract, the importations of which from 832,277 pounds in fiscal year 1913 were reduced by the war to 413,848 pounds in fiscal year 1919, although it has since shown tendency to recover, has really more the character of a raw material than that of a finished product. The difference of three-fourths of 1 cent between the rates on

licorice extract and licorice root is sufficient to protect the former for its higher value in the sweet principle of licorice, as well as for the correspondingly higher freight on licorice root, which, together with other items in the cost of production of licorice extract in this country is offset by the much lower cost here of fuel, the most important factor in the cost of production of licorice extract.

These facts we feel, justify this chamber in recommending that the present rates of one-fourth cent per pound on licorice root and 1 cent per pound on licorice extract be continued without change on these commodities.

EPSOM SALTS.

[Paragraph 42.]

P. W. DRACKETT, REPRESENTING CERTAIN MANUFACTURERS OF MAGNESIA SULPHATE.

Mr. DRACKETT. P. W. Drackett; I represent 8 out of 11 manufacturers of epsom salts in the United States.

We are producing at the present time about 43,000,000 pounds of epsom salts out of 50,000,000 that is estimated will be produced during the year 1920.

We are recommending that the duty be increased 1¼ cents per pound.

The reason for that recommendation lies in the fact that the cost of labor is a great deal greater here than in foreign countries. The amount of wages paid here is about $5 a day. According to the latest information obtainable, the average daily wage for similar labor in Germany at the present time is about 56 cents per day.

Epsom salts incidentally is a very valuable remedy; veterinary medicine.

During the year ended June 30, 1914, there were manufactured in the United States 29,285,115 pounds of epsom salts. As compared with the year 1920, that will show an increase of approximately 50,000,000 pounds. That remarkable increase is due to the fact that during the war-time period Germany was not enabled to manufacture epsom salts under such conditions as to enable them to get any surplus stores.

This means that this industry employs American labor at greatly increased cost over the present price of German labor. And we are using American raw materials which comes from the mines of California, Washington, Texas, and Louisiana.

The Germans are offering to sell epsom salts at $1.40 in the United States at the present time. There is 10 cents per hundred duty, 40 cents per 100 pounds for freight, which actually makes the cost at the European port 90 cents. Granting, or assuming, that they must pay for their agents' commissions and costs of taking their products from their works to the port of entry another 20 cents, and their cost therefore at the time of shipment at their plant 70 cents, and add to that the duty we are asking, 1¼ cents, and you would have $1.95 for their cost as against a cost of $2.87 which we have to pay. But we are willing to take the chances. We believe that we will be able to take care of ourselves in the manufacture of epsom salts in the United States, largely in view of the fact, and taking into consideration the fact that there may be decreases in the cost of labor in the United States reducing our cost, and also the difference in the rate of exchange may bring us closer.

The CHAIRMAN. Mr. Drackett, your 10 minutes are up. You will file a brief with the clerk?

Mr. DRACKETT. Yes, sir; I will be glad to do so.

Mr. HULL. What rate do you want?

Mr. DRACKETT. One and one-quarter cents.

Mr. HULL. What is your rate now?

Mr. DRACKETT. One-tenth of 1 per cent.

Mr. HULL. You just want an increase one hundred and twenty times the present rate?

Mr. DRACKETT. Yes, sir.

BRIEF OF CERTAIN MANUFACTURERS OF MAGNESIA SULPHATE.

We, the undersigned manufacturers of magnesii sulphas (epsom salts) in the United States, offer for your consideration and submit to you such recommendations as will permit the continuation of the manufacture of this most important chemical by American manufacturers, for which the raw materials are all available in this country.

Existing tariff.—You are referred to 1913 tariff, paragraph 42, Schedule A.

Change recommended.—It is recommended that the existing duty of one-tenth of 1 cent per pound be increased to 1¼ cents per pound.

Reasons for recommended change.—The reason for this recommendation lies in the fact that the cost of labor entering into the production of epsom salts in the United States is fully 1 cent per pound greater than the cost of the same labor in Germany, the principal importing country of epsom salts. Added to this the German manufacturer has an advantage of fully one-quarter cent per pound in his raw material costs, thus making the German cost of production 1¼ cents per pound less than the cost of production in the United States.

Importance medicinally.—Magnesii sulphas (epsom salts) has been known in medicine since 1675, and recent investigations and experiences have proven it to be one of the most important agents in materia medica, both for internal and external application. The importance of epsom salts is fully recognized by the Medical Department of the United States Army and Navy in adopting it as one of its most important remedial agents for the American Expeditionary Forces. Because of this fact, epsom salts was classed by the War Industries Board as an essential industry during the recent war. Epsom salts is also a valuable remedial agent much used in veterinary medicine.

Importance technically.—Besides its use medicinally, epsom salts enters technically into several important industries. It is used very largely in the process of tanning leather, and is also employed in the textile and enameling industries. Under these conditions the United States should not be compelled either in time of peace or war to depend on foreign countries for so important and necessary a product as epsom salts.

Development.—In the year ending June 30, 1914, there were manufactured in the United States 29,265,115 pounds of epsom salts, and a report just completed by the manufacturers of this country shows that during the year 1920 this quantity was increased to approximately 50,000,000 pounds. This remarkable increase is due to the fact that during the war time period Germany was unable to manufacture epsom salts in such quantities as would enable her to dump any surplus stock into the United States. This menace removed, American capital employing American labor clearly demonstrated its ability to supply the American market, the raw materials coming direct from the mines of California, Washington, Louisiana, and Texas.

Future prospects.—If this industry is afforded the necessary protection so that it may be placed on the same basis as that of the foreign producers in the matter of manufacturing cost, it can supply the entire needs of the United States and provide for the natural increasing demand.

Number of employees affected.—At the present time there are employed in the manufacture of epsom salts in the United States about 300 men in direct production and 140 men in indirect production, to which must be added the usual pyramided labor employed in the process of converting the raw material in the mines to the finished product ready for the market.

Domestic production costs.—During the past year, while plants were in full operation, the average cost of production in the United States, as determined by the manufacturers of this country, amounted to $2.78½ per 100 pounds, of which $1.12 per 100 pounds represents labor cost.

Comparable wage in United States and Germany.—The average wage paid by manufacturers in the United States is $5 per day of 10 hours each. According to the latest information obtainable, the average daily wage for similar labor in Germany at the present time is but 56 cents per day.

Source of imports.—All of the epsom salts produced in Germany is made from kieserite, a natural product from the Stassfurt mines, obtained in the mining of potash, which mines are more or less controlled by the German Government.

Control of German product.—The sale of German epsom salts is controlled by a so-called kartell—an aggravated trust of gigantic dimensions, the policy of which is to market epsom salts at a high price on the European Continent and throughout Great Britain, and to dump at ruinously low prices its surplus on the market of the United States.

German policy inimical to American industry.—The policy of this trust was to compel any American buyer negotiating for the purchase of German epsom salts in large quantities to give a bond guaranteeing that he would not resell either on the European Continent or in Great Britain. That the same prewar tactics and policies are again being put in force to the detriment of American industry and American labor is evidenced by a signed letter now being generally mailed to prospective buyers throughout the United States, a photographed copy of which is herewith attached.

German trust control.—Particular attention is directed to the maximum price quoted in that letter, which, including freight and duty, is $1.40 per 100 pounds f. o. b. New York, or $1.38½ per 100 pounds less than the cost of production in the United States. The explanation for this quotation is to be found in the last paragraph of the letter, which—with remarkable candor—announces the fact that "German manufacturers of epsom salts belong to a trust which prohibits any underselling under heavy penalty," thereby indicating a price control by a foreign trust which is not amenable to American laws and contrary to them.

Volume of exports.—There were imported into the United States in the year ending June 30, 1914, 13,759,598 pounds of epsom salts, of which 85.5 per cent were imported from Germany, 5 per cent were imported from Belgium, 3.3 per cent were imported from Italy, 3.1 per cent were imported from England, and 3.1 were imported from France, which, according to the Department of Commerce, Bureau of Foreign and Domestic Commerce—Miscellaneous Series No. 82, page 36—was valued at $49,281, or 36 cents per 100 pounds.

Increased revenue to United States.—While it may be possible that the recommended increase of duty to 1¼ cents per pound on imported epsom salts may not result in a decrease of imports of this commodity, yet, granting that it may cause a decrease of 50 per cent, the amount of revenue still would be a little more than six times greater to the United States than that derived during the year 1914 at the present rate of one-tenth cent per pound duty.

Under our recommendation there will be added to the income of the Government not only increased revenue on imports but also the income derived through the internal revenue taxes on corporations and individuals who will thus be enabled to carry on the manufacture of American epsom salts.

P. W. DRACKETT.

Representing Victor Chemical Co., Chicago, Ill.; the Clarke Chemical Co., Cleveland Ohio; the Lennox Chemical Co., Cleveland, Ohio; the P. W. Drackett & Sons Co., Cincinnati, Ohio; the Ohio Chemical & Manufacturing Co., Cleveland, Ohio; C. W. Hill Chemical Co., Los Angeles, Calif.; Crystal Carbonic Laboratory, Atlanta, Ga.; Pacific Silicate Co., San Francisco, Calif.

NEW YORK, *December 27, 1920.*

GENTLEMEN: At this time we are in a position to book your orders on epsom salts, technically pure quality, for prompt shipment from Hamburg. The following prices are given in marks per long ton of 2,240 pounds f. o. b. Hamburg.

In single jute bags of 200 pounds, 1,300 marks.

In double jute bags of 200 pounds, 1,500 marks.

In barrels of 800 pounds, 1,500 marks.

Figuring the present rate of exchange, 1.39, you will note that the price ranges from $18 to $21 per long ton, dependent upon packing. Adding to this the freight rate to New York, which amounts to about $8 per ton, and the import duty of one-tenth cent per pound, you will readily see that the above quotations leave a good margin for profit.

Prices could not be cheaper, as German manufacturers of epsom salts belong to a trust which prohibits any underselling under heavy penalty. In view of the low rate of exchange and our connections, we could negotiate very favorable transactions at this time. Prices are subject to fluctuation, and we would therefore appreciate it if you took up the matter with us at once.

ALLCHEM CO.

FISH OIL.

[Paragraph 44.]

DWIGHT K. BARTLETT, SECRETARY OF THE TRITON OIL & FERTILIZER CO., PROMISED LAND, LONG ISLAND.

Mr. BARTLETT. I speak in behalf of 34 fish oil producers, out of a total of more than 100 scattered from Eastport, Me., to Galveston, Tex., and including the entire Pacific coast and Alaska. These 34 plants operate more than 150 vessels, give employment to more than 5,500 men, and have an annual turnover of approximately $11,000,000.

With its present facilities the industry can fully supply the normal domestic demand. In the past we have occasionally been forced to market a surplus abroad, so that there is no danger of the protection which we ask tending to create an artificial price for oil in the home market.

Fish oil is manufactured both from nonedible whole fish, menhaden particularly, and from the waste products of food fish packing plants. It is used in the manufacture of oilcloth, window shades, linoleum, cements, auto tops, soap, paints, varnishes, in the treatment of leather, tempering of steel, core making in foundries, and as a blending agent in lubricating oil.

You will note that fish oil does not enter into the cost of producing any of the necessities of life, except in an infinitesimal degree, consequently a duty on fish oil will not impose a burden on the consuming public. In time of war glycerin was extracted from fish oil for use in the manufacture of explosives, but the fish-oil industry is in no sense a "war baby," having been conducted in the United States continuously for more than 70 years.

While the operation has been painful and costly, I am happy to say that the industry has already gone through its afterwar deflation. We have not come before you to urge you to maintain wartime prices for us by artificial means. The fact is, that notwithstanding our increased cost, we are selling fish oil to-day for 30 per cent less than before the war, largely due to Japanese competition. The menace of this Japanese competition is real and not imaginary, as the import statistics will show. We are powerless to compete with Oriental manufacturers who pay their workmen less for a season's work than we pay our lowest priced man for a month's labor; who operate under no restrictions as to the kind of fish used, or the grade of men that may be employed on their steamboats.

The value of fishing fleets as a reserve to the Navy was thoroughly demonstrated in the recent war, when thousands of our fishermen answered the call and manned our fighting ships, while their trawlers and seigning steamers were converted into mine sweepers and patrol boats. The fisheries are of vital importance as a source of food at all times and like their companions of the meat industry their success depends, to a great measure, upon the profitable use of their by-products. If these can not be converted into fish oil at a profit, they must be discarded, and the entire cost of food fishing operations assessed against the consuming public, resulting in higher prices and in turn a less effective development of the fisheries.

Fish fertilizer is manufactured simultaneously with fish oil. We do not ask for a duty on fish fertilizer. Protection on fish oil will automatically increase the output of its companion product and make more fertilizer available for the farmer.

We recommend a duty of 25 cents per gallon on fish oil, because a careful study of operating conditions here and in the Orient has convinced us that this represents the average advantage which the Japanese producer enjoys because of his labor and manufacturing differential.

The facts I have outlined here are set forth in detail and substantiated by evidence incorporated in a complete brief to be filed with your committee for your examination. Our industry stands ready to supply you with any further facts concerning our operations which you may require. They will bear your fullest scrutiny.

Mr. GREEN. Will you tell us about how much is on hand now of fish oil in the country?

Mr. BARTLETT. Of course the season in the South is not quite completed, and the statistics have not yet been fully completed for this year. They will probably be in this brief which we will submit. One thing that has delayed our preparation for this case has been the fact that the fish oil which comes as a by-product of the food fish industry was not represented at our meeting right now, because those producers were of the opinion that they presented their case under the fish schedule, which I think is Schedule G, and we are without that data, which we expect to have now in a very few days, and we will then file it.

Mr. BACHARACH. How much of this oil comes from Australia?

Mr. BARTLETT. I am from the Atlantic coast industry and our oil comes very largely from menhaden. I can not tell you about that. These 34 producers that I am representing are almost——

Mr. BACHARACH. Do you represent practically all of the fish factories all over the country?

Mr. BARTLETT. From Long Island Sound to Cape Fear River. We have not got the Gulf statistics. There are a few fisheries in Maine.

WOOL GREASE.

[Paragraph 44.]

FRANKLIN W. HOBBS, ARLINGTON MILLS, BOSTON, MASS.

Mr. HOBBS. Mr. Chairman, I have a brief already prepared which the clerk will give you. I am not primarily representing the Arlington Mills but also concerns which produce about 90 per cent of the wool grease produced in the country, and am chairman of a committee representing all of them. I do not think you want me to take the time to read this brief.

Wool grease is under paragraph 44 of schedule A. It has been dutiable at various rates and is under the present bill dutiable. We are requesting a duty of 1 cent a pound. That, on the basis of the present values, is about 20 per cent ad valorem, which we consider low for either protection or revenue rate.

Mr. RAINEY. Is that on the grease itself?

Mr. HOBBS. On the grease itself, a 20 per cent ad valorem would be about 1 cent, selling for about 4½ to 5 cents a pound.

Mr. RAINEY. That would be 400 per cent more than they pay now.

Mr. HOBBS. The present tariff is a quarter of a cent. At that time wool grease was selling all over the world at 2 cents. To-day it is selling at 5 cents. It has been up as high as 20 cents within the last few years. It is now selling at about 5 cents a pound and has been for more than a year past about that price, so that we estimate that at an equivalent of about 20 per cent ad valorem. That seems a very low rate, as low as half a cent was when grease was selling at 2 cents.

The CHAIRMAN. To what use is wool grease put?

Mr. HOBBS. It is used very largely by the leather industry in filling leather, and also mixed with other greases in cordage. In this brief I have detailed the different processes and also the imports, and prior to the war the imports averaged about 1,000,000 pounds a month and 12,000,000 to 14,000,000 pounds a year.

The entire production in this country is about 10,000,000 pounds. So it is on a highly competitive basis, and would incidentally produce revenue to the extent of the duty levied on it. About 55 to 60 per cent of the consumption of the country is now imported and has been for many years.

Mr. RAINEY. I notice from your brief that in 1919 there was only imported 249,320 pounds for the entire 12 months.

Mr. HOBBS. Of course, all imports have been completely upset during and since the stoppage of the war. This is only made when the woolen and worsted factories of the world are in operation, and the imports have dropped off very much of late; but the demand in this country under normal conditions of industry in tanning and cordage and other grease and oil consumption has been for many years back, even prior to the first five-year period, running from 12,000,000 to 15,000,000 pounds a year imports.

Mr. RAINEY. You think the imports are going to be any greater now than they were during five years prior to the war?

Mr. HOBBS. We have estimated they would be the same. Assuming they were the same, the country has consumed anywhere from 20,000,000 to 25,000,000 pounds for a long period prior to the war, of which 8,000,000 to 10,000,000 pounds are made here and the balance have been imported.

Mr. DICKINSON. Mainly from Germany?

Mr. HOBBS. Very largely from England, some from Germany, but I think the greater percentage of the imports have come from England. It can be readily bought now in large quantities and available for purchase after import at the present time.

Mr. RAINEY. What I do not quite understand is your position that the five years prior to the war at a duty of one-fourth of 1 per cent it brought in a million pounds a month, an average of a million pounds a month.

Mr. HOBBS. Yes, sir.

Mr. RAINEY. And the industry prospered and got along all right. Now, you think it is going to bring in the same, about the same amount when normal conditions are restored. As a matter of fact, at the present time they only bring in about——

Mr. HOBBS. An average of 5,000,000.

Mr. RAINEY. Only a fraction of that amount.

Mr. HOBBS. The last five years.

Mr. RAINEY. If your wildest anticipations are realized you would not be any worse off than you were during the five years prior to the war. I would like to know why you need more tariff than you had then.

Mr. HOBBS. You will note the price at that time was down. There was a price of about 2 cents a pound. Our costs of production are from two and one-fourth to two and one-half times what they were before. The cost of the material itself is higher, and the cost of the labor is higher in everything in that production as it is in everything else.

Mr. RAINEY. In relation to the labor cost in Germany—that is where, I imagine, most of it comes from—have you any figures on that as to the difference in labor cost here and there?

Mr. HOBBS. Yes. I was told in Passaic, N. J., day before yesterday, by a worsted spinner who has just returned from Germany and who some years back had large connections there, that they are paying to-day in Germany in worsted spinning mills 50 marks a day. That is 65 cents in our money to-day. American gold can buy it for 65 cents a day. We are paying about $3—$3 to $3.25.

Mr. LONGWORTH. Is the grease a by-product of your mills?

Mr. HOBBS. It is a product that we recover. It is not the main product, if you would call any product a by-product.

Mr. LONGWORTH. Well, do you buy most of your wool in the grease?

Mr. HOBBS. Yes.

Mr. LONGWORTH. It is only a product in so far as you would buy the wool in the grease?

Mr. HOBBS. It is a very useful and necessary product when you consider that they import 12,000,000 pounds a year. It is an essential product.

Mr. LONGWORTH. I am asking why are these large woolen and worsted mills very much interested in producing wool grease?

Mr. HOBBS. In the first place, it is a thing that is needed in the country. In the second place, it has a value, of course. The country produces about 25,000 to 27,000 barrels a year, I think. It is worth at 5 cents a pound about $20 a barrel.

Mr. LONGWORTH. What proportion of these concerns that you represent buy wool in the grease, and what proportion of that wool that you buy is grease wool?

Mr. HOBBS. Practically all grease wool.

Mr. LONGWORTH. That I did not understand.

Mr. HOBBS. It is the usual way the wool is bought on the market. There is a small amount of scoured wool, pulled wools and scoured, a comparatively small amount.

Mr. GREEN. Mr. Longworth and I did not understand your answer to his question, because both of us got the impression from you that only a small part was grease wool.

Mr. HOBBS. You misunderstood me. Practically all of the wool that is consumed is greasy wool.

Mr. LONGWORTH. So one of your first processes in the manufacture of wool is removing the grease?

Mr. HOBBS. Yes. We have to remove the wool grease. The first process is the removal of the grease and the question of its recovery. Also there is a question, as outlined in this brief, of encouraging the industry on account of the pollution of the streams.

The purification of the rivers prevents that product being not recovered; and if the price is cut down so low, of course, it is done at a loss, and it is a waste product.

Mr. LONGWORTH. In your experience with wool, how much does wool shrink in washing?

Mr. HOBBS. Very veriable. Perhaps it runs all the way from 30 per cent to 75 or 80 per cent.

Mr. LONGWORTH. As much as that?

Mr. HOBBS. Oh, yes. I might interest you on that point. Wool grease amounts to somewhere from 8 to 12 and sometimes 14 per cent of the weight of the wool.

Mr. LONGWORTH. Of the weight?

Mr. HOBBS. Yes, sir.

Mr. HAWLEY. Of the fleece.

Mr. HOBBS. Of the fleece as we buy it.

Mr. LONGWORTH. Fourteen per cent of the weight?

Mr. HOBBS. Eight to fourteen per cent; yes, sir.

Mr. LONGWORTH. That is very interesting.

Mr. HOBBS. Heavy grease wools run as high as that. The average are less than that, but they do run up as high as that.

Mr. GREEN. That is the first time I have got that statement, and we have gone over this wool question on previous tariffs.

Mr. HOBBS. These 12 firms whose names are given here make about 22,000 barrels I think a year.

Mr. DICKINSON. I see the statement that most of the wool grease imported in 1914 came from Germany, while England sent more crude wool grease than any other country.

Mr. HOBBS. That is correct.

Mr. DICKINSON. What is the difference between the wool grease and the crude wool grease?

Mr. HOBBS. Well, I am talking entirely on the so-called, as the tariff calls it, crude wool grease. That seems to bear on what I said before, that England was the greatest shipper of "Wool grease, including that known commercially as degras or brown wool grease, crude and not refined or improved in value or condition."

Mr. DICKINSON. Wool grease would be refined and the crude wool grease would be the brown or unrefined?

Mr. HOBBS. Yes, sir. When you get into refined, you come into what is referred to as lanoline. A certain amount of the fatty acids that are in this crude grease we are talking about here to-day has to be removed, then quite a percentage of water is put in, then that becomes lanoline and the basis of a great many medicinal salves and soaps. That is what has been imported from Germany and France, in comparitively small amounts. I mean, a barrel of that goes a long way for medicinal salves and things of that sort, whereas a barrel of commercial wool grease for a rope walk or for a tanner is only a question of a few hours or a few days of consumption.

Mr. LONGWORTH. Do you sell direct to the tanner and other persons who use it?

Mr. HOBBS. Yes, sir. We sell direct to the tanner; and we sell in our own business, in the Arlington Mills, to State prisons in quite a number of places who are large customers of ours where they have

rope walks, and to others outside of that work. The Standard Oil Co. is a large consumer for the heavy lubricating oils.

Mr. GREEN. If you had to discard this product, throw it into the river, in what form would it be then when you throw it away?

Mr. HOBBS. Well, it would be in with the water, the waste waters that have scoured the wool, in the ordinary cases.

As I point out here, there are three different ways in which this grease is recovered. There is the so-called sulphuric acid process that is used. The wool is put in large tanks and scoured with a strong soap to remove the grease. Then that waste water is evaporated down, treated with sulphuric acid, and the grease recovered by that process.

Then, another process is by the use of naphtha, which is the one used in the Arlington Mills. There we recover the grease directly from the wool, the same as you would take a spot out of your clothes, a spot of grease. Large tanks——

Mr. LONGWORTH. You use it directly on the fleece?

Mr. HOBBS. Yes. Large tanks are filled with wool. Then naphtha is forced through under pressure. Of course, it is all sealed tight. Then a vacuum is put on; and the concentrated naphtha and grease is then washed off with clear naphtha. The vacuum is put on and the whole business is pulled out. That might interest you. The most remarkable feature of that process is that it takes about 40 minutes to do the whole thing from the time we start. You all will recall, if you ever had any naphtha cleansing, how the naphtha odor lasts for a considerable time. After those doors are thrown open you can get in the tank and remove the wool, and there is absolutely no odor of the naphtha then. You would never know that naphtha had been within 5 miles of that tank.

The last process is by the centrifugal process where the same waste waters are treated by a centrifugal machine very similar to a cream separator or milk arrangement in which the stuff is rotated and the heavy part is separated from the other, and recovered in that way.

All of these three processes are of considerable initial installation expense and operating expense. At the present price of 5 cents I do not think anyone in the country is making the cost of recovery to-day.

Mr. GREEN. How would you treat the wool if you were not trying to recover this grease?

Mr. HOBBS. You would treat it with a strong soap water. Then the whole waste stuff would be simply thrown away.

BRIEF OF FRANKLIN W. HOBBS, REPRESENTING WOOL GREASE PRODUCERS.

GENTLEMEN: We, the undersigned, a committee representing American manufacturers of crude wool grease, call to your attention the fact that importations of such wool grease are now assessed under the tariff act of October 3, 1913, paragraph 44, Schedule A, as follows:

"Wool grease, including that known commercially as degras or brown wool grease, crude and not refined or improved in value or condition, one-fourth cent per pound."

We respectfully and earnestly request you to increase the duty now levied on degras or brown wool grease, crude and not refined or improved in value or condition, to 1 cent per pound.

Wool grease, as its name implies, is grease taken out of wool and is found in all wool as it comes from the sheep's back at shearing. This grease is used in large quantities by tanners for a filling for hides, by cordage manufacturers, and in combination with other greases for lubricating oils, and for sundry other purposes. Furthermore, in its refined form its curative properties are also of undoubted value for medicinal purposes.

There are three principal methods used for recovering this grease:

1. By means of the so-called sulphuric-acid process, by which the grease is recovered from the water used to wash wool.

2. By the use of naphtha, by which the grease is removed from the wool before it is washed.

3. By the centrifugal process, by which the grease is also recovered from the water in which the wool is washed.

All three of these processes involve large capital investment for installation of plants and large expense for operation.

The domestic production of crude wool grease, commercially known as degras or brown wool grease, when the woolen and worsted mills of the country are running at full capacity amounts to about 25,000 barrels or, say, 10,000,000 pounds per year. The importations of such grease for normal years before the World War averaged fully 12,000,000 pounds per year, so that the total consumption of the United States in normal times has run, in round numbers, to about 22,000,000 pounds per year.

It will be noted, therefore, that the imports of this grease were about 55 per cent of the total consumption, and the balance is made in this country. The imports of crude wool grease entered for consumption into the United States for the past 10 years, as shown by the tables compiled from the reports of the Bureau of Commerce and Navigation of the United States, are given below. You will note that they are given in two sections: First, the five years, 1910 to 1914, inclusive, which represent the normal prewar conditions; second, the five years, 1915 to 1919, inclusive, which represent imports under what may be called war conditions. We believe that as soon as normal conditions of business are resumed in this country and abroad imports will again come back to the average of not less than 12,000,000 pounds per year, for that amount taken with the domestic production will be necessary to meet the requirements of our country.

Amounts and values of exports of wool grease or degras (crude grease).

[Figures up to 1918 were for fiscal years ending June 30, and for the year 1919 for the calendar year, this change having been made in the methods of tabulation.]

Year ending June 30.	Rate of duty.	Amount in pounds.	Value.	Duties.	Value per unit of quantity.	Actual and compiled ad valorem rate.
1910	½ cent	13,396,097	$230,538	$33,490.25	$0.017	14.53
1911	do	13,782,834	231,035	34,457.14	.017	14.91
1912	do	10,789,726	210,997	26,974.35	.02	12.78
1913	do	14,473,551	328,991	36,183.00	.023	11.00
1914	do	12,284,248	292,988	30,710.64	.024	10.48
Total		64,726,456	1,294,549	161,815.38		
Average for 5 years	½ cent	12,945,291	258,910	32,363.08	.020	12.50
1915	½ cent	9,281,273	286,705	23,203.18	.031	8.09
1916	do	7,617,713	350,535	19,044.28	.046	5.43
1917	do	4,861,795	294,326	12,154.50	.061	4.13
1918	do	4,639,947	398,143	11,599.00	.086	2.91
1919	do	249,320	27,562	623.30	.111	2.26
Total		26,650,048	1,357,271	66,624.26		
Average for 5 years	½ cent	5,330,010	271,454	13,324.85	.051	4.91

Foreign wool grease can be bought freely in this country, duty paid, at from 4½ to 5 cents per pound, and the domestic price is about 5 cents per pound at the present time.

This price is so low that many of the American manufacturers have been compelled either to sell their grease at a loss or to discontinue its manufacture.

If the American manufacturer can not recover and dispose of his wool grease at least at cost, he will, of course, stop its recovery. This will represent a direct economic loss, both to the manufacturer and to the community.

Incidentally the disposing of such a waste product by dumping it directly into the rivers and streams, as will be done in some localities, or indirectly into such rivers and streams through public sewers, as in other localities, results in pollution of the rivers and streams which could be prevented if such grease were to be recovered by all of our manufacturers instead of only a few, as at present. It is clear that unless

they can secure a satisfactory price they will not install the expensive plants that are necessary to recover the grease.

From every point of view we feel, therefore, that this product should not be wasted, but that every effort should be made to encourage its recovery. With this in mind, we believe that the duty suggested should be applied. The present duty is too low to enable the American manufacturer to recover the grease and sell it at a price which will pay for its recovery. The proposed duty of 1 cent would be the equivalent of about a 20 per cent ad valorem rate, which we feel is a lower basis than is commonly recognized as a purely revenue basis and which therefore must be considered a very moderate rate for either revenue or protection.

The amount that we request can certainly be neither a hardship nor a burden to the American consumer of wool grease or to the public; but, small as it is, it practically means to American manufacturers the difference between recovering this grease and letting it go to waste.

We believe that public policy justifies the increase requested, both as a revenue measure and because it will enable progressive manufacturers who have devised some means of recovering and utilizing this grease to continue to do so, and will induce other manufacturers who have heretofore allowed it to go to waste to put in plants for its recovery. This must inevitably result in direct public benefit through an increase in revenue and through saving a product which would otherwise be lost. The purification of our streams and rivers, which necessarily follows, is also certainly worthy of consideration.

The petitioners are all manufacturers of crude wool grease and do not manufacture wool grease described in the tariff as "refined or improved in value or condition." Our petition, therefore, refers only to the duty on wool grease known commercially as degras or brown wool grease, but we trust that you will place a proper additional duty as has been the custom in the past on refined grease.

This brief is filed in behalf of the following concerns which produce about 90 per cent of the wool grease made in the United States:

Arlington Mills, Lawrence, Mass.; Barre Wool Combing Co., Barre, Mass.; Hudson Worsted Co., Hudson, Mass., Victoria Mills, Thornton, R. I.; Lafayette Worsted Mills, Woonsocket, R. I.; Lorraine Manufacturing Co., Pawtucket, R. I.; Pacific Mills, Lawrence, Mass., Winslow Bros. & Smith Co., Norwood, Mass.; Erben-Harding Co., Philadelphia, Pa.; Botany Worsted Mills, Passaic, N. J.; United States Wool Combing Co., Camden, N. J.; Cleveland Worsted Mills Co., Cleveland, Ohio; Franklin W. Hobbs, Harold S. Edwards, Henry F. Dysone, committee representing above-named producers of wool grease.

WOOL GREASE.

[Paragraph 44.]

BRIEF OF COMMITTEE REPRESENTING THE WOOL GREASE PRODUCERS OF THE UNITED STATES, BOSTON, MASS.

GENTLEMEN: We, the undersigned, a committee representing American manufacturers of crude wool grease, call to your attention the fact that importations of such wool grease are now assessed under the tariff act of October 3, 1913, paragraph 44, Schedule A, as follows: "Wool grease, including that known commercially as degras or brown wool grease, crude and not refined or improved in value or condition, one-fourth cent per pound."

We respectfully and earnestly request you to increase the duty now levied on degras or brown wool grease, crude and not refined or improved in value or condition, to 1 cent per pound.

Wool grease, as its name implies, is grease taken out of wool and is found in all wool as it comes from the sheep's back at shearing. This grease is used in large quantities by tanners for a filling for hides, by cordage manufacturers, and in combination with other greases for lubricating oils and for sundry other purposes. Furthermore, in its refined form its curative properties are also of undoubted value for medicinal purposes.

There are three principal methods used for recovering this grease: (1) By means of the so-called sulphuric-acid process, by which the grease is recovered from the water used to wash wool. (2) By the use of naphtha, by which the grease is removed from the wool before it is washed. (3) By the centrifugal process, by which the grease is also recovered from the water in which the wool is washed. All of these processes involve large capital investment for installation of plants and large expense for operation.

The domestic production of crude wool grease, commercially known as degras or brown wool grease, when the woolen and worsted mills of the country are running at full capacity, amounts to about 25,000 barrels, or, say, 10,000,000 pounds per year. The importations of such grease for normal years before the World War averaged fully 12,000,000 pounds per year, so that the total consumption of the United States in normal times has run, in round numbers, to about 22,000,000 pounds per year.

It will be noted, therefore, that the imports of this grease were about 55 per cent of the total consumption, and the balance is made in this country. The imports of crude wool grease entered for consumption into the United States for the past 10 years, as shown by the tables compiled from the reports of the Bureau of Commerce and Navigation of the United States, are given below. You will note that they are given in two sections. First, the five years, 1910–1914, inclusive, which represent the normal prewar conditions; second, the five years, 1915–1919, inclusive, which represent imports under what may be called war conditions. We believe that as soon as normal conditions of business are resumed in this country and abroad imports will again come back to the average of not less than 12,000,000 pounds per year, for that amount, taken with the domestic production, will be necessary to meet the requirements of our country:

Amounts and values of imports of wool grease or degras.

[Figures up to 1918 were for fiscal years ending June 30, and for the year 1919 for the calendar year.]

Year ending June 30—	Rate of duty.	Amount in pounds.	Value.	Duties.	Value per unit of quantity.	Actual and compiled ad valorem rate.
	Cent.				*Cent.*	
1910	½	13,396,097	$230,538	$33,490.25	0.017	14.53
1911	½	13,782,684	231,035	34,457.14	.017	14.91
1912	½	10,789,726	210,997	26,974.35	.02	12.78
1913	½	14,473,551	328,991	36,183.00	.023	11.00
1914	½	12,284,348	292,988	30,710.64	.024	10.48
Total		64,726,456	1,294,549	161,815.38		
Average for 5 years	½	12,945,291	258,910	32,363.08	.020	12.50
1915	½	9,281,273	286,705	23,203.18	.031	8.09
1916	½	7,617,713	350,535	19,044.28	.046	5.43
1917	½	4,861,795	294,326	12,154.50	.061	4.13
1918	½	4,639,947	398,143	11,599.00	.086	2.91
1919	½	249,320	27,562	623.30	.111	2.26
Total		26,650,048	1,357,271	66,624.26		
Average for 5 years	½	5,330,010	271,454	13,324.85	.051	4.91

Foreign wool grease can be bought freely in this country, duty paid, at from 4½ to 5 cents per pound and the domestic price is about 5 cents per pound at the present time.

This price is so low that many of the American manufacturers have been compelled either to sell their grease at a loss or to discontinue its manufacture.

If the American manufacturer can not recover and dispose of his wool grease at least at cost, he will of course stop its recovery. This will represent a direct economic loss both to the manufacturer and to the community.

Incidentally, the disposing of such a waste product by dumping it directly into the rivers and streams, as will be done in some localities, or indirectly into such rivers and streams through public sewers as in other localities, results in pollution of the rivers and streams which could be prevented if such grease were to be recovered by all of our manufacturers instead of only a few, as at present. It is clear that unless they can secure a satisfactory price they will not install the expensive plants that are necessary to recover the grease.

From every point of view we feel, therefore, that this product should not be wasted, but that every effort should be made to encourage its recovery. With this in mind, we believe that the duty suggested should be applied. The present duty is too low to enable the American manufacturer to recover the grease and sell it at a price which will pay for its recovery. The proposed duty of 1 cent would be the equivalent of about a 20 per cent ad valorem rate, which we feel is a lower basis than is commonly recognized as a purely revenue basis and which, therefore, must be considered a very moderate rate for either revenue or protection.

The amount that we request can certainly be neither a hardship nor a burden to the American consumer of wool grease or to the public, but, small as it is, it practically means to American manufacturers the difference between recovering this grease and letting it go to waste.

We believe that public policy justifies the increase requested, both as a revenue measure and because it will enable progressive manufacturers who have devised some means of recovering and utilizing this grease to continue to do so, and will induce other manufacturers who have heretofore allowed it to go to waste to put in plants for its recovery. This must inevitably result in direct public benefit through an increase in revenue and through saving a product which would otherwise be lost. The purification of our streams and rivers, which necessarily follows, is also certainly worthy of consideration.

The petitioners are all manufacturers of crude wool grease and do not manufacture wool grease described in the tariff as "refined or improved in value or condition." Our petition, therefore, refers only to the duty on wool grease known commercially as degras or brown wool grease, but we trust that you will place a proper additional duty as has been the custom in the past on refined grease.

This brief is filed in behalf of the following concerns which produce about 90 per cent of the wool grease made in the United States: Arlington Mills, Lawrence, Mass.; Barre Wool Combing Co., Barre, Mass.; Hudson Worsted Co., Hudson, Mass.; Victoria Mills, Thornton, R. I.; Lafayette Worsted Mills, Woonsocket, R. I.; Lorraine Manufacturing Co., Pawtucket, R. I.; Pacific Mills, Lawrence, Mass.; Winslow Bros. & Smith Co., Norwood, Mass.; Erben-Harding Co., Philadelphia, Pa.; Botany Worsted Mills, Passaic, N. J.; United States Wool Combing Co., Camden, N. J.; Cleveland Worsted Mills Co., Cleveland, Ohio.

FRANKLIN W. HOBBS,
HAROLD S. EDWARDS,
H. T. DYSON,
Committee Representing Producers of Wool Grease.

OLIVE OIL.

[Paragraph 45.]

ANTONIO ZUCCA, OF THE ITALIAN CHAMBER OF COMMERCE, NEW YORK CITY.

Mr. ZUCCA. Mr. Chairman, I will be very short. Before the war olive oil was very cheap, was very low in price, and was therefore a very common food for the people in America. Everybody was using olive oil. The price was about $1.50 to $1.75. Then the war broke in and the price went higher. In Italy olive trees are used a great deal for fuel. They did not have coal and they had to cut the trees for fuel in many cases.

Labor was scarce, and therefore the Italian Government and the Greek Government and the French Government began to cut off exports. The price went from $1.50 and $2 per gallon up to $4 and $5, and whereas olive oil was formerly a necessity it is now becoming a luxury.

The ingenious Americans began to put substitutes for olive oil on the market. They put several substitutes—peanut oil and cotton-seed oil—on the market as substitutes. Of course, I believe that they were making so much money on selling substitutes that they advertised very extensively in our newspapers and magazines, etc.

Mr. TREADWAY. Now, were these substitutes offered as olive oil?

Mr. ZUCCA. They were advertised as such.

Mr. TREADWAY. Could that be done under the pure food act?

Mr. ZUCCA. I do not believe that it can, but they are doing it, and I saw, gentlemen, advertisements in the papers advising people to buy these substitutes. They said that these substitutes for olive oil were just as good and equal to the olive oil.

Mr. TREADWAY. But they sold them as substitutes, they did not represent them to be olive oil?

Mr. ZUCCA. No; but they said they were just as good, which is a lie. Well, now, gentlemen, if the United States Government is going to put up a high duty on olive oil—certainly there is no need for a protective tariff on this olive oil, and it will deprive the American people of genuine olive oil, and they will have to buy a substitute which will probably be more injurious to them, and they could not enjoy the genuine olive oil.

Mr. TREADWAY. Then you advocate no duty on olive oil?

Mr. ZUCCA. No, sir: I say no advanced duty.

Mr. TREADWAY. What is it at present?

Mr. ZUCCA. Twenty cents per gallon in bulk and 30 cents for packages. The present duty is 20 cents on olive oil in bulk and 30 cents in cans or in bottles, and I do not think that ought to be advanced. I think that is sufficient duty.

Mr. TREADWAY. Do you know whether or not your views coincide with those of the people from California?

Mr. ZUCCA. Well, California is for California, of course. Of course California is looking out for themselves and for the California people, and they want us to advance the rate, I presume that is the feeling of California. But, California can not produce enough oil. They probably think if the rates are increased they can produce more oil, but they do not.

The CHAIRMAN. In other words, every fellow for himself?

Mr. ZUCCA. Well, I think so; I think that is human nature.

The CHAIRMAN. I agree with you.

Mr. ZUCCA. But with regard to the California situation, California does not produce enough olive oil for their own consumption for the consumption in the State of California, and I know as a fact that all of the packers of fish and sardines in California could testify to that fact. They can not secure enough olive oil in California, and of course they are buying Italian oil. That is a fact, and it can easily be proved.

The CHAIRMAN. I have heard it said, but I do not know how true it is, I have no specific proof, that we are exporting cottonseed oil to Italy, and that it is coming back over here as olive oil. Do you know anything about that?

Mr. ZUCCA. The pure food people are looking for that, and every shipment of olive oil arriving here is examined by the pure food department. It is examined very carefully, and if they find out that it is not what it is represented to be, they seize it.

I am in the olive-oil business, too, and California, of course, produces some oil. I think they produce about 350,000 gallons; but, as I say, that is not enough for the consumption of California, and I know that the packers of fish and sardines in California have to use Italian oil. They buy Spanish and Italian oil because they do not have enough of their own oil.

Now, with regard to olive oil, certainly if you advance the duty it will become a luxury and not a necessity, and everybody knows that oil is a necessity. In the Latin countries they say, "grain, wine, and oil." They say that those are the three necessities. Of course, with regard to wine the United States Government has cut

that off. Now, if you increase the tariff on olive oil you are going to cut off oil also.

Mr. FREAR. Do you know of anyone who is urging an increase in the tariff on olive oil at this time?

Mr. ZUCCA. I do not know, but I would imagine so. I was in California myself in May, and most of the people there claim that we ought to have—well, they claim that we ought to have a $1 a gallon. Of course, I do not know whether they are going to advocate an increase as much as that or not. And, for that reason, the Italian Chamber of Commerce is coming before you, and wants to state that we think it would be an injustice, and would be a mistake to increase the duty, and that we think the present duty of 20 cents per gallon for oil in bulk and 30 cents for oil in packages is sufficient, with free commercial oil, which is beneficial to the manufacturing industry here. I believe that would be the best.

Mr. FREAR. Are you a manufacturer?

Mr. ZUCCA. I am an importer. I buy some California oil occasionally. When I was in California I bought oil. Of course, I do not think it is as good as Italian oil. It is not raised on the same kind of soil. The American, the California, land is too rich, and the taste is not as good as the Italian or Spanish oils, I do not think.

Mr. TREADWAY. What is the Italian Chamber of Commerce which you represent? Is it a trade organization, an American organization?

Mr. ZUCCA. Oh, yes; it is an organization in the State of New York.

Mr. TREADWAY. Are the members all citizens of the United States?

Mr. ZUCCA. Yes, every one of them. Every one is a citizen of the United States.

The only thing we advocate, of course, we advocate business intercourse between Italy and the United States. We are shipping to Italy a good many goods, and we import a good many goods from Italy, and we think it is good business to take their oil in exchange for the goods which we send them, especially in view of the present exchange condition.

Mr. TILSON. California produces only about 2 per cent of the oil anyway that is used in this country?

Mr. ZUCCA. It is a very small amount.

Mr. TILSON. The figures furnished by the United States Tariff Commission, their report says that California produces practically 2 per cent of the amount of olive oil that is used or consumed in the United States, that the entire domestic production, and——

Mr. ZUCCA. I think the production in California is something like 350,000 gallons.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

SIR: The Italian Chamber of Commerce in New York begs to submit the following statements and recommendations with regard to olive oil, paragraph 45:

The present tariff levies a duty of 30 cents per gallon on olive oil in bottles, jars, kegs, tins, or other packages having a capacity of less than 5 standard gallons each: and of 20 cents per gallon in other containers not specifically provided for in said section.

This chamber desires, first of all, to impress upon your committee the necessity that duty on this as, whenever possible, on other commodities, should be continued at a specific and not at an ad valorem rate. Olive oil is an article exceedingly difficult to value, and it would be a very expensive proceeding for the Government. We doubt if any appraiser could properly value the numberless grades, qualities, and

blends imported from markets not always in a very developed or settled condition. It would lead to endless disputes, to the injury of the honest and the benefit of the dishonest merchants. The present instability of the exchange, which is expected to continue for some time, would add materially to the difficulty of appraising an ad valorem duty on this article. We feel that, owing to the above-stated technical and commercial difficulties as well as to the much higher cost of collection of an ad valorem rate, the duty on olive oil should continue on the specific basis, as it has always been, and, if consistent with revenue, at a reduced rate

Olive oil is a food of prime necessity and a medicine besides to a great number of the population of this country, many among the poorer classes, in whose diet it takes the place of butter and other fats, with the advantages of the greater economy and the hygienic benefits, exclusively identified with olive oil and pertinent to its use and due to its recognized nourishing, upbuilding, and health-giving qualities.

The war has done considerable and, if not remedied, irreparable damage to the importation of olive oil into the United States. This importation, which previous to our entry into the war had been increasing annually at a rate of from one half to a million gallons, has since decreased to an alarming extent and is still far from recovery, as the following figures of United States imports of olive oil will show:

	Gallons.
1910–11	4,405,827
1911–12	4,836,515
1912–13	5,221,001
1913–14	6,217,560
1914–15	6,710,967
1915–16	7,224,431
1916–17	7,533,149
1917–18	2,537,512
1918–19	4,283,136
1919–20 (owing to shortage of the 2 previous years)	6,812,596
1920 (first 9 months of calendar year)	3,245,059

The reasons of this decrease are numerous and varied. Production has fallen somewhat during the war, owing to the cutting down of olive trees for wood in some parts of Italy due to the penury of fuel, to the lack of fertilizers not always obtainable, to the ravages of the olive fly and to the lesser care of cultivation forced by the scarcity of labor, called under the colors. The available supply of olive oil, therefore, is lesser to-day than it was before the war, no new planting except perhaps to replace dead trees, having taken place in the meantime, and, even if it had, with the slow growth of olive trees, requiring decades before they come into bearing, production not becoming available before at least 15 years, unless olive groves are extended in Italy, which was not the tendency in prewar times, there is not likely to be in future, even in favorable years, an oversupply of olive oil in that country.

According to statistics recently published in the New York Journal of Commerce, the olive-oil crop in the Mediterranean countries for the season 1920–21 has been estimated at 597,000 metric tons, the following countries contributing to this total: Spain, 210,000 tons; Portugal, 35,000 tons; Italy, 150,000 tons; France, 10,000 tons; Algeria, 15,000 tons; Tunis, 15,000 tons; Morocco, 12,000 tons; New Greece, 70,000 tons; other countries, 80,000 tons. The total world's production of olive oil was estimated a decade ago as ranging between 733,000 and 916,000 metric tons, the decrease in supply being thus manifest.

While the output has been lesser, the cost of production has, on the other hand, greatly increased. To begin with labor; its cost is now seven times greater than before the war, while the day's work, which used to be from sun up to sun down, has dwindled to eight hours. Then the cost of material has greatly increased, the item of tins and cases alone, which was before the war about 10 centesimi (hundredths) of lira per gallon, having reached now 3 lire per gallon. Maritime freight, which figured at 2 cents per gallon in prewar times, is now 10 cents per gallon. Besides this, consideration should be given to the notable increase that has taken place in the price of the oil itself at the primary markets. The result is that to-day American consumers, finding olive oil out of their reach on account of its exceptional high prices, may be compelled to resort to surrogates, such as cotton, corn, peanut, and soya-bean oils, tending to displace it, not on account of their intrinsic qualities but by reason of their low price. The fall in the price of surrogates, such as cottonseed oil, is due in large part to the failure to do the usual export business.

The olive oil trade should be encouraged in the interest of public health. The medical profession universally indorses its high medicinal properties. It does not compete with any home industry. California, the only State producing a little olive

oil, and being next to New York the largest consumer of imported olive oil, is not a factor in the olive-oil trade, as it does not even produce enough for her own consumption, and has to import largely of this commodity, notwithstanding the advantages of a 30 cents per gallon protective duty, of a 22 cents per gallon transcontinental freight, and of freedom from any fiscal restrictions as to trade, operating as a further protection.

The present total area of olive groves in California was estimated in 1918 by the State department of agriculture, equal to 31,023 acres of which only 18,801 were bearing fruit and 12,222 had not come yet into bearing. The yield in 1919 was 14,000 tons of olives. It is estimated that with the entire 31,023 acres yielding their full capacity, the total would not exceed 24,000 tons an output however, which will require many years before it can be reached. As it takes about 1 ton of olives to yield 40 gallons of olive oil, California could not possibly hope to produce in any one year more than 960,000 gallons of olive oil. This represents only 11½ per cent of the total annual consumption of olive oil in this country, which is estimated, according to the importations for calendar year 1919, at about 8,302,000 gallons. But, as a matter of fact, less than one-half of the California olive crop is pressed into olive oil, the balance being packed into tins and otherwise prepared. E. F. Woodward, a California olive grower and authority on this subject, estimated the California olive oil crop in 1908 at about 350,000 gallons, and it can not have materially increased since then.

Developments of recent years cause us to view the olive oil importation from another angle. It is coming more and more to be imported as a raw material entering into and developing industry in this country. In the past few years packers of fish—especially tuna and sardines—have used vast quantities of olive oil in their packing. This is practically a new industry developed since the war, and increased cost of olive oil would greatly retard if not destroy it. Besides, the packing of olive oil, imported in bulk, into bottles and tins has grown to considerable dimensions, gives employment to many people and creates a demand for tins, bottles, shooks, and other materials, all of which benefits industry here.

A slight survey of figures gives us vivid proof of this. Whereas before the war in 1913 only about one-third of the olive oil imported was in bulk, we find that in 1919 this had risen to about seven-eighths of the total importation. So that to-day we must consider and treat olive oil more in the light of a raw material feeding an industry here than as a finished or manufactured article entering into immediate consumption.

On account of the material of American origin that the packing abroad requires, the importation of olive oil in this country should be looked upon in the light not of competition but of a stimulus to American industry and trade.

While this chamber is in favor of maintaining the difference now existing in the rates of duty between olive oil in bulk and olive oil in packages of smaller size than 5 gallons, this difference should remain as it is, in order to encourage the use of olive oil in its original package, and to give to the consumer the guaranty that it carries with it; to discountenance the mixing of a lower with a higher grade of oil, and because most of the packing material, such as tin plate and shooks used for the olive oil imported is, after all, of American origin, of which Italy is the largest buyer in this country, and for which American packing has the advantage of lesser cost.

If the overseas trade of this country, built during the war, is to be continued, it must be prepared to take back some merchandise in exchange, as this country can not expect to be paid always in gold. To this end it seems advisable to encourage the importation of an article which is one of the staple productions of the Mediterranean countries and which does not enter into competition of any home product and besides aids in the development of business at home. Under such a category should olive oil be classed.

In conclusion this chamber recommends that the present rates of duty on olive oil should remain unchanged, i. e., 30 cents per gallon for olive oil in bottles, jars, kegs, tins, or other packages having a capacity of less than 5 standard gallons; and of 20 cents per gallon for olive oil not specially provided for in paragraph 45 of the present tariff (namely, olive oil in containers of 5 gallons capacity or over). These rates, while ample for the purpose of protection, are also sufficient for revenue purposes.

R. V. DELAPENHA, PRESIDENT OF THE OLIVE OIL IMPORTERS' ASSOCIATION.

Mr. DELAPENHA. Mr. Chairman, you asked Mr. Zucca, who represents the Italian Chamber of Commerce, a question in regard to cottonseed oil, that you had been told, like a number of other people,

that cottonseed oil was exported in large quantities abroad, and came back as olive oil.

The CHAIRMAN. Yes.

Mr. DELAPENHA. May I be permitted to answer that question?

The CHAIRMAN. We would be very glad to have you do so.

Mr. DELAPENHA. The thing would be impossible because the United States Department of Agriculture, through its bureau of chemistry, in every port of our country examines every shipment of olive oil that comes to the United States, and unless it is pure, it is immediately reexported.

The CHAIRMAN. Does not Italian olive oil come in in several different grades?

Mr. DELAPENHA. Undoubtedly; but the various grades referred to by the trade has reference to the number of pressings of the olive itself. The first pressing is supposed to be the best, and the second pressing, the third, and so on, repressed, other qualities.

The CHAIRMAN. I thank you for the information. You think, then, that no cottonseed oil comes back over here as olive oil?

Mr. DELAPENHA. It is impossible. There is not any way that it can be done. That would be fraud.

Mr. GREEN. The Government goes through all of the stores from time to time and picks out bottles and samples every little while, and examines this olive oil. That is done by Government agents.

Mr. DELAPENHA. I also want to answer a question that some gentleman on this side asked. I do not know who it was that asked the question about the substitution of other oils for olive oils.

The CHAIRMAN. I think I asked the question.

Mr. DELAPENHA. Well, whoever it was, I can say that there is substitution of other oils for olive oil, and if you will read the reports of the Government that are published every month, you will see that there is condemnation after condemnation where unscrupulous dealers sell cottonseed oil as pure olive oil, and when they find one of these dealers doing that they fine them the very large sum of $30 to $60.

Mr. TREADWAY. May I ask a question?

The CHAIRMAN. Certainly.

Mr. TREADWAY. You spoke of the reduced rates of exchange; is that benefitting the importation of olive oil in this country in any way?

Mr. DELAPENHA. No. The contrary is the case. The price has risen to such value that it is killing the sale, even with the reduction in the value of exchange.

Mr. TREADWAY. Will that result in a different price; will it result in a higher price or a lower price? I would like to have you tell the committee whether or not olive oil is higher now than formerly.

Mr. DELAPENHA. Very much.

Mr. TREADWAY. Very much higher?

Mr. DELAPENHA. Yes.

Mr. TREADWAY. But assuming that this was practically a normal time, how much would this difference be in the depreciated currency or the depleted exchange; how much would that effect the importation?

Mr. DELAPENHA. Well, to answer that, the value of olive oil prior to 1914 was about $1.75 a gallon, and to-day the maket price is about $4.50; if we could buy olive oil on the basis of 75 cents a gallon

and buy it on a basis of the present depreciated currency, why, we would be doing a very flourishing business and conferring a great boon on humanity in the United States because they would be getting a valuable article of food very cheap.

Mr. TREADWAY. Your prices are about two and one-half times what they formerly were?

Mr. DELAPENHA. Yes.

Mr. TREADWAY. But the compensation has decreased very materially?

Mr. DELAPENHA. Yes.

The CHAIRMAN. Mr. Delapenha, the time allotted you has expired. We will be glad to have you file a brief.

Mr. DELAPENHA. Yes, sir; I will. Thank you.

BRIEF OF R. V. DELAPENHA, PRESIDENT OLIVE OIL IMPORTERS' ASSOCIATION.

The present tariff, approved October 3, 1913, provides the rates of duty for olive oil imported, in the following language: "Schedule A, section 45: Oils, expressed: * * * olive oil, not specially provided for in this section, 20 cents per gallon; olive oil, in bottles, jars, kegs, tins, or other packages having a capacity of less than 5 standard gallons each, 30 cents per gallon * * *."

In opposition to any suggestion to increase the present rates of duty on olive oil, mentioned above, the Olive Oil Importers' Association, an association of merchants organized in order to foster the interests of the olive-oil trade, and having their offices at 17 Jay Street, in the city of New York, through its president, R. U. Delapenha, respectfully present the following facts:

The value of olive oil has already reached abnormal proportions owing to the disastrous effects of the late war. Even with exchange greatly in favor of the purchasers, prices have advanced to such a point that the consumption of this product is decreasing at an alarming rate, and in consequence jeopardizes a very large investment of American capital, should these values be maintained. To illustrate this point, permit me to call to your attention the following figures showing the imports:

United States imports of olive oil.

	Gallons.		Gallons.
1910–11	4,405,827	1916–17	7,533,149
1911–12	4,836,515	1917–18	2,537,512
1912–13	5,221,001	1918–19	4,283,136
1913–14	6,217,560	1919–20	[1] 6,812,596
1914–15	6,710,967	1920	[2] 3,245,059
1915–16	7,224,431		

These figures speak for themselves so eloquently that we shall now pass on to another phase of the situation.

Prior to the opening of hostilities in August, 1914, the olive-oil industry, as a strictly American industry, was limited in proportion to a few houses who had commenced the packing of olive oil in cans and bottles on this side of the water instead of in the countries of origin.

During the period commencing August, 1914, and ending December, 1919, it was found necessary by importers here to erect plants and to install expensive and delicate machinery for the purpose of refining and packing this product in various sizes from 5-gallon tins to one-sixteenth-gallon tins, and in a large variety of sizes of glass bottles.

Whilst before August, 1914, about one-third of the olive oil imported into the United States was imported in bulk (that is packed in large barrels or casks), whereas at the close of the year 1919 this condition had changed to show that seven-eighths of the total importation of olive oil came to us in bulk (that is in barrels or in casks).

This development of this industry might be better brought before your kind attention by stating the figures available from the American Can Co., of New York, manufacturers of lithographed tins for olive oil. In the year 1916 they manufactured for some few packers 118,350 olive-oil cans. In 1919 these figures had increased to 1,189,000 olive-oil cans for these same packers. No doubt the reports that can be

[1] Owing to shortage of the two previous years. [2] First nine months of calendar year.

obtained from other can manufacturers, besides the one mentioned above, would show an equally substantial increase.

The allied trades have been greatly benefited. It has been necessary for the glass manufacturers to add to their lines the forms and shapes of olive-oil bottles that we were accustomed to purchase in Europe prior to the war. This has extended their operations into a field of endeavor that was entirely new to them, and must have proved of considerable profit.

We must also refer to the manufacturers of wooden cases in which the final product is packed for shipment in interstate commerce.

The industry of the manufacturers of caps and corks have also been benefited.

The ultimate consumer alone has been the sufferer, and to add a further tax would in no way alleviate her condition.

We are told by our foreign correspondents that the olive growers have suffered in some of the countries of production to a very great extent. Many of the trees were cut down to be used for fuel. Lack of labor and the high cost of labor prevented the care of the trees that they require.

The production in countries like France and Italy was held largely intact for home consumption, owing to the lack of all grease and fats. Spain passed stringent laws in regard to the exportation of olive oil, so that their own people might not be deprived of a product that is looked upon not only in their own countries, but in all Mediterranean countries, as vital to the existence of the people.

Then came the element of speculation, which seems to have entered into every product that was dealt in throughout the world.

But it is manifest that if prices are still high for various causes, and with exchange largely in our favor, granted that there may be a reduction of prices, the moment exchange becomes nearer normal, whatever reduction might have taken place, will have been reabsorbed.

Olive oil is a food, not a luxury. In the older countries, it takes the place in the household next to bread. Its therapeutic value is acknowledged. All our leading physicians give "baby" its first bath in olive oil.

Its nutritive value taken as a food is so well known and is so often spoken of in history that it needs no further comment from me here.

The importation of olive oil into the United States in bulk in no way interferes with domestic olive oil and the development of that industry. As far as we know it is only produced in one State, and the production is insufficient for the population of that State itself, judging from the importations and purchases of olive oil that finally reach that State. I refer, of course, to California.

I now give you the published reports of the production of olive oil in the United States for the following years:

	Gallons.
1916	193,453
1917	127,614
1918	81,900
Sept. 30, 1919, to Sept. 30, 1920	65,600

We are in favor of maintaining the difference now existing in the rates of duty between olive oil in bulk and olive oil in packages in smaller sizes than 5 gallons. That is, 30 cents per gallon for olive oil in bottles, jars, kegs, tins, or other packages having a capacity of less than 5 standard gallons, and of 20 cents per gallon for olive oil not specially provided for in paragraph 45 of the customs tariff act of October, 1913, namely, olive oil in containers of 5 gallons capacity or over. This tax should be sufficient for all purposes.

NATHAN MUSHER, PRESIDENT MUSHER & CO., NEW YORK CITY.

Mr. MUSHER. Nathan Musher, president Musher & Co., New York, N. Y.

Mr. Chairman, gentlemen of the committee, I want to go on record as approving Mr. Zucca and Mr. Delaphenha's recommendations that the olive-oil tariff be not disturbed and that it be left at 20 cents on bulk and 30 cents on package importations per gallon.

The CHAIRMAN. You are an importer and not a manufacturer?

Mr. MUSHER. We are importers, and manufacturers in the sense that we import the pure olive oil, if I may so refer to my own com-

pany. We brought in over 1,300,000 gallons, or approximately that amount, last year. We brought in about 750,000 gallons this year.

We have no protection to give California in the way of raising our duty. I have here a telegram I would like to read before the committee:

LOS ANGELES, CALIF., *January 6.*

MUSHER & Co., *Washington, D. C.*

Your telegram January 3 addressed California cooperative canneries San Jose referred to us as they decided not to press oil this year account unfavorable conditions. We will have approximately 2,000 gallons pure oil pressing, cost approximately 75 cents gallon bulk basis boxes cans filling extra. Cost olives averages $75 ton acidity content California olive oil usually average one or one one-quarter per cent are you interested purchasing.

CALIF. GROWERS ASSN. (INC.).

The California Growers Association (Inc.), can only offer—the greatest amount that they can offer is 2,000 gallons of olive oil, at the very low price of 75 cents a gallon, bulk-basis boxes, can filling extra. We are to-day not able to bring over any great supply of olive oil from Europe because of the export embargoes from Italy and Spain. You can not bring in any olive oil at all, because they are keeping the supply for home consumption and they will only let us bring in what they do not need for their home consumption. They will permit that to be exported, and then we have to pay an export tax on that, so that will take care of that end, and they will be protected. We have to pay a very large export tax. They make every exporter pay those heavy export taxes from Spain. We are not only importers on this side, but we are exporters of their goods on the other side. In other words, we buy in the foreign market their produce, and bring over their goods, so that makes us exporters from the other side, while we are as well importers on this side. We are packers and distributors on this side also.

The Spanish Government makes us set aside 1½ gallons of olive oil at prices dictated, too, by food administrator of Spain before they will permit us to send out a gallon of oil from Spain, and on that gallon of olive oil they ask us and make us pay an export tax of $1.50 to $2. That is just what we have to depend on now

Mr. GREEN. Most of our olive oil comes from Spain?

Mr. MUSHER. We get all of our olive oil, and have been getting all of it since the war, from Spain. Spain is the largest producer of olive oil in the world. Italy comes second. Spain's oil is as good in quality as Italian oil. There are good and bad Italian oils, and there are good and bad Spanish oils. There used to be a great deal of Italian oil used in this country; it was used for refining purposes.

If I may be permitted to speak for ourselves, we were the first ones to bring over this oil in bulk or in the raw state.

Mr. GREEN. Our Tariff Commission reports we get quite a considerable amount of oil from other countries. Is this Spanish oil that is shipped to those countries and then reexported?

Mr. MUSHER. A great deal of the oil coming from other countries originally came from Spain.

Mr. HULL. Don't you get some oil from other countries?

Mr. MUSHER. We get very little from Mount Lebanon, and we get a very little from Tunis. The oil from Tunis is shipped to Marseille.

The CHAIRMAN. Have covered those rates in your brief?

Mr. MUSHER. I have covered them in my brief.

The CHAIRMAN. All right. Is this situation of which you speak a permanent situation, or only a temporary one?

Mr. MUSHER. We hope it is only a temporary one, but it is now in effect and we do not know how long it is going to exist. I want to make a few remarks with regard to the present exchange rate. The situation is such that the importation of these goods can not be done in any appreciable quantity without the importer putting himself in the position of going bankrupt next day. All over the entire country our exports and imports are at a standstill and will have to remain so as long as present conditions exist, unless the merchant is willing to take a chance of going bankrupt, and many importers are actually bankrupt, but they still continue to do business.

BRIEF OF NATHAN MUSHER & CO., NEW YORK CITY.

SIR: Knowing that your time is very valuable, we will not force you to delve into many pages containing our views why Musher & Co. is opposed to an increase in the present tariff on olive oil, but we will try to explain our views in brief statements.

We feel that these views should be taken with deep consideration by your committee, due to our company having paved the way for the sale of superior quality olive oil in the United States for the past 13 years.

By advertising, efficient methods, and small profit per tin we have proved to the consumers of United States the need of using olive oil as a medicine, the necessity for cooking foods with olive oil among those whose religious laws forbid using animal fat, as a salad dressing, or for the packing of sardines and tuna fish, etc.

At the time of our starting business in 1907, there were 2,447,000 gallons of olive oil imported into the United States, while in 1919, over 9,000,000 gallons were imported. When we started selling olive oil, the production of olive oil in California was but 100,000 gallons, and the production of olive oil in that section has stayed around the aforementioned figures since then.

The highest production of olive oil in California was in 1916 when 200,260 gallons were produced. These figures tell you briefly the story—that the consumption of olive oil in the United States had gone ahead with leaps and bounds, yet California production has almost been at a standstill, even in the years of 1907 to 1912, during which time the Payne-Aldrich tariff of 40 cents a gallon was enforced. This proves that this high protective tariff did not encourage the producing of more olive oil in California.

Briefly, our objections to an increase of the present tariff on olive oil are based on the following honest, sound, businesslike views:

1. The oil industry in America, which is centered in California, has never been the chief revenue of the olive growers of California. According to the statement of the Olive Growers' Association only 35 per cent of the olives produced are used to make olive oil; the remaining 65 per cent of olives go in as follows: Fifty per cent used to pack ripe olives; 5 per cent used to pack green olives; 5 per cent used to pack Greek olives; 5 per cent used to pack minced olives.

2. The California production of olive oil has never taken care of the consumption in the United States. In 1918 members of the Olive Association of California claimed that they would start on an extensive increase of acreage from 36,040 acres, producing 200,266 gallons of olive oil to 500,000 acres, which would enable them to produce 10,000,000 gallons of olive oil. We are afraid these statements are "dreamy." First, to produce superior quality olive oil that the consumers of the United States demand, will necessitate trees to mature to 50 years or more. In Spain and Italy, where Musher & Co. obtain almost all of their oil, some of the best grades of olives come from trees 150 years old; while in Aiden, Smyrna, some of the olive trees are 500 to 600 years old. Must we tax the American consumer from 50 to 100 years just to protect an industry so small as the California olive oil industry?

3. The better grades of olives are used in the packing of ripe and green olives, as these olives must be from the unblemished, freshly picked, high grade olives, otherwise they will arrive on the market in an inferior condition. From statements of producers, we have been given to understand that culls are mainly used to make olive oil while in the older European countries the reverse is true in that the very finest selected olives are used for oil.

4. The packers of sardines and tuna fish in California (an industry representing an investment of approximately $25,000,000) are firmly opposed to the increase of tariff on olive oil. These packers used almost three-quarters of a million gallons of olive oil a year and are unable to use California olive oil, due to the high percentage of free fatty acid. There must be some good reason on the part of these firms who are true Californians, when they can not use an oil made right at their doorsteps.

We submit to you Exhibits A and B, giving the views of the sardine packers of California. We feel sure that you will listen to the appeal of these people in California, who are striving to pack sardines of the same grade as in Europe.

California olive oil always meets the highest prices that imported olive oil is called upon to place from time to time, but there are many cases where California olive oil does not meet the low prices that in normal conditions have existed. Even though the importers and packers of olive oil at the present time are compelled to sell olive oil at cost, and sometimes below cost, without asking protection as the olive-oil packers in California are asking.

5. Olive oil, after being crushed, must be stored in the very best of care, or, as it is known among the trade, "mother" or "age" the oil. For this reason Musher & Co. maintain very expensive warehouses throughout Spain and Italy, where the oil is brought in by local farmers and immediately placed in tiled tanks and kept at an even temperature, away from the light and air, which are detrimental to olive oil. When a ship is ready to transport the oil to America, it is placed in new oak barrels and transported to our plant in Baltimore. At this place we maintain storage tanks of 1,400,000 gallons capacity. These are glass-lined tanks where the oil is stored with the utmost care, and prior to shipping is filtered through 500 thicknesses of filter paper.

Briefly, this means the investment of a tremendous capital, while in California we understand that the oil is only stored for two months. There is no reason why capital costs more or is harder to obtain in California than it is for us in Baltimore, yet we know of no company in California that has tried to give the consumer the high grade of oil that our firm has, though we have started against all obstacles and with the competition of many oils have become the leading importer and packer of olive oil in the United States.

6. At the present time Musher & Co. (as well as every importer of olive oil) is striving to reduce the cost of olive oil to the consumer, as we realize that when the cost of a product is extremely high, it creates a hardship upon the person who must use superior grade olive oil, and lowers our sales.

We are confronted with a tremendous obstacle in obtaining license in the various production centers in Europe.

Our ocean freights, plus insurance, amount to 20 cents a gallon, while a gallon of olive oil can be brought from San Francisco to New York for 17 cents. Thirty-three per cent of our sales are west of Chicago, so that we must and have met the price of oil in California which has been shipped from our plant in Baltimore.

We are compelled to pay the same price for labor, for packing, filtering, etc., cases, tins, salesmanship, shipping in the United States and general overhead, as California. By expert knowledge of selling of a national product and efficient cost-saving methods, we are able to give the consumers of the United States olive oil at a cost much less than is effective in California.

A member of the California association stated that packers of olive oil could greatly improve their present methods of packing and distributing olive oil, but due to the amount of olives consumed in the manufacturing of olive oil being one-third of the total quantity produced, the interest is not as great as it might be; and it may take many years to change their methods of taking care of their olives in the efficient methods as practiced by certain known importers of olive oil.

Briefly, we ask that you maintain the present duty on olive oil in order to prevent a greater increase of prices, which in turn is passed on to the ultimate consumer, who in our minds, is overtaxed in every way. We know that it is not the intention of your committee to place any tax as a revenue getter, but only as a protection, and we are sure that you will not be protecting the California industry whatsoever by increasing any tax, but will be passing on an increased cost to the ultimate consumer.

If suggestions are in order to your committee, we suggest that regardless of whether you increase the duty of olive oil or not, that you change the duty to so much per pound as is the case with peanut or other vegetable oils now being imported. This view is based on the method of purchasing oil. In Europe all prices are so much per 1 or 100 kilo and the equivalent in pounds is 2¼ or 220 pounds, respectively. It will facilitate in collecting duty by the customs department.

We submit to you the attached exhibits.

EXHIBIT A.

SAN DIEGO, *January 4, 1921.*

California sardines packed entirely in imported olive oil. Unable to use California olive oil on account of high per cent of free fatty acid. California sardine and tuna packers use approximately three-quarters of a million gallons per year. Tariff on olive oil will work detriment to California sardine packers. European packers can import canned sardines in olive oil on the present rate of foreign exchange cheaper than we can pack entire sardine. Canners on the Pacific coast closed down on account of the low rate of foreign exchange and competition with foreign sardines. California olive oil not in competition with foreign olive oil. Prices range the same and used in different channels.

POMPEIAN SEA FOOD CO.

EXHIBIT B.

SAN DIEGO, CALIF., *January 6, 1921.*

California and main canners all interested in this legislation. Fish packing largest industry on Pacific coast, representing approximately $25,000,000. California olive-oil industry a very small factor. Very little oil manufactured until last year and only for the reason that no sale of olives compelled growers to make olive oil. Prices of olives affected same as cotton, wheat, lemons, and other farm products by low prices.

POMPEIAN SEA FOOD CO.

EXHIBIT C.

A. L. Mazro, one of the largest importers of Italian products on the Pacific coast, makes the definite claim that California could produce the best olive oil if the manufacturers and growers would only apply themselves to improving the product and quit considering it a mere secondary incident of their business.

"There is no question but that the California olive people could readily make a fine grade of oil, probably as good as that made in Italy, but owing to the fact that they place the oil business as secondary they are not giving it the needed attention," he said.

"Only the little olives, fruit that is not fit for canning or pickling, and the bruised fruit is used in California for pressing purposes. In Italy the finest olives are employed for this purpose."

BRIEF OF THE CALIFORNIA OLIVE ASSOCIATION.

Domestic olive growing industry asks increase in duty on imported edible olive oil in bulk to 60 cents per gallon; in packages of less than 5 gallons, to 70 cents per gallon; on mechanical olive oil, now on free list, a duty of 20 cents per gallon is recommended.

California and Arizona now have growing 40,178 acres of olive trees. The production of olives from this acreage in a normal year is 16,000 tons.

Twenty-six commercial olive factories are in operation in the two States named. Together with the olive groves, bearing and young trees, the domestic olive industry represents an investment of from $25,000,000 to $30,000,000.

Between eight and nine thousand people are employed in growing and manufacturing olive products in California and Arizona.

In normal times the cost of producing olive oil in this country is $1.63 per gallon in bulk. Figures from the Bureau of Foreign and Domestic Commerce show that the export value of imported olive oils during a 15-year period preceding the war was 98.1 cents per gallon—the production cost of these oils not exceeding 65 cents per gallon at the factory.

Labor costs in the Mediterranean olive-producing countries, as reported by American consular agents, averaged in prewar times about 75 cents per day for all classes of workers, orchard and factory, while during the same period the wages paid for similar labor in California and Arizona averaged $2.50 per day.

The ocean freight rates favor the foreign producer of olive oil in the proportion of two to one over the domestic producer; the recent increase in freight rates in this country has added heavily to the burden carried by our growers and packers, the rate on olive oil in carload lots from California to Chicago or New York now being 15.6 cents per gallon, while the ocean freight rate from Europe averages 7 to 8 cents per gallon.

The olive growers of California and Arizona can not expand their industry while a large portion of the product of their groves must be made into oil which competes with

foreign oils grown, manufactured, and transported to this country at costs less than half of those which the domestic producers must pay.

With an adequate duty such as asked herein the olive oil industry of this country will be afforded a protection of its large present investment, which will encourage the expansion of the producing area and thus create a substantial addition to the food resources of this country.

There is a great market in the United States for good olive oils, as yet but partially developed, and the stimulation of the domestic olive oil industry is an economic necessity.

The large amount of olive oil imported annually (8,301,890 gallons in 1919) will produce a very substantial revenue for the Government under the rates recommended, and at the same time the domestic olive oil producer will be enabled to establish and extend his investment in this food industry.

This latter consideration is of prime importance to the country in view of the lesson learned during the war, when our people found themselves dependent on foreign countries for necessary supplies because the industries producing these had not been sufficiently developed.

The California Olive Association is an organization of olive growers and manufacturers and represents the olive industry of this State in matters affecting the development of said olive industry. It also represents at this time and in connection with tariff duties the olive industry of Arizona.

RECOMMENDATIONS OF THE ASSOCIATION.

On behalf of the olive growers and manufacturers of California and Arizona we ask that the rates of duty in Schedule A, paragraph 45, of the tariff act of October 3, 1913, be increased on edible olive oil from the present rate of 20 cents per gallon in bulk to not less than 60 cents per gallon, and that the duty on edible olive oil in containers of less than 5 standard gallons be increased from the present rate of 30 cents per gallon to not less than 80 cents per gallon, and that on olive oil rendered unfit for use as food by such means as shall be satisfactory to the Secretary of the Treasury and under regulations to be prescribed by him, now exempted from duty in paragraph 561 of the free list of the act of October 3, 1913, shall be levied a duty of not less than 20 cents per gallon. In support of this request we present the following statement of facts pertaining to the olive industry of California and Arizona and the conditions under which we sell our product in competition with imported olive oils:

1. *Present competitive conditions.*—At the outset we wish to state that the conditions which have influenced exportations of olive oil from the Mediterranean countries during the past two years have been such as to maintain the prices at which this olive oil has sold in this country at a level that has afforded virtual protection to the olive oil of California and Arizona. In other words, the shortage of exportable olive oil in the countries of the Mediterranean during the past two years has caused the prices of olive oil in this country to remain firm, and thus the domestic growers and packers have not been subjected to the intense competition which formerly prevailed when imports of olive oil were much larger.

In addition to this fact there is the further one that during the World War and continuing until a short time ago this country exported very large quantities of vegetable and other oils to European countries in need of such products, and this tended to strengthen the market here for olive oils, imported and domestic.

2. *Prospect of increased imports.*—We can not, however, depend on this situation continuing. Already our exports of vegetable oils are falling off to a very large extent because of the unfavorable exchange rate, but what is of greater importance to the domestic olive-oil industry from the standpoint of competition is the prospect of greatly increased exports of olive oil from the Mediterranean district, and principally from Spain, which country has in the past two years limited the quantity of olive oil which might be sent out of the country.

3. *Exporters anticipate large oil shipments.*—In this connection we reproduce below an excerpt from a letter recently received by a California olive-packing firm from the Oleicola Tarragona, exporters, of Tarragona, Spain. Writing on November 15, 1920, from Tarragona, the Spanish concern says:

"We are in position at this time to offer you important large lots of oil of all qualities, if you are interested. It would be necessary for you to send a sample of the oil you desire, so as to give us an opportunity to arrive at the quality and prepare a similar type, on which we can quote the lowest prices, because our labor conditions place us in a position to give you the quality desired at the lowest price.

"We would be obliged if you would indicate the quantity of olive oil which you could use at each monthly shipment in case our quotations would interest you. As

soon as the regulations we are now working under as regards export permits are changed our Government will grant in a few months a new method of exportation, permitting us to realize and offer large quantities of our liquids, because we will soon be in the new crop, and we would thank you to give us a prompt answer, so we may commence operations with all necessary haste."

4. *Extent of domestic olive plantings.*—According to recent surveys, the acreage planted to olives in California and Arizona is 40,178. Of this acreage 29,295 is of bearing age (6 years and over), and 10,883 acres are less than 6 years old.

5. *Groves average 15 to 20 acres in size.*—Individual olive holdings average between 15 and 20 acres, and we estimate the number of olive growers in the two States at 2,500. With the laborers employed continuously and seasonally in these groves, the average number of people engaged in the actual growing of olives is conservatively placed at 6,000.

6. *Twenty-six commercial olive factories.*—There are 26 olive processing plants in operation in California and Arizona at the present time. This number includes the concerns having an output of commercial importance in size, in addition to which there are not less than twice this number of small packers whose operations are limited to supplying customers in the vicinity of the plants, the average individual output of these latter being about 4 to 15 tons of olives a year.

7. *Investment in industry.*—There is invested in the olive industry in California and Arizona between $25,000,000 and $30,000,000.

8. *Number of people employed in industry.*—The handling of olives requires the employment of a large number of workers, male and female, during the harvesting season, which lasts ordinarily about four months. In the 26 commercial olive factories in California and Arizona some 2,800 people find annual employment during the canning season, a lesser number, of course, working continuously throughout the year.

In all, therefore, not less than 8,800 people in California and Arizona look to the domestic olive industry for all or the principal part of their means of livelihood.

9. *All plants affected by oil market.*—Of the 26 olive plants mentioned, 13 have olive-oil making equipment, the remaining plants sending the oil olives they purchase (that portion of the crop which can not be made into ripe canned olives) to the concerns having the facilities for manufacturing oil. As the noncil manufacturing plants are obliged to buy oil olives along with the fruit intended for ripe canning, and must thereafter endeavor to dispose of such oil olives at prices that will at least not mean a loss, it is seen that all olive manufacturers, as well as growers, are directly affected by the state of the olive-oil market.

10. *Normal output of olive industry.*—From the present bearing olive acreage in California and Arizona the crop in a year of normal production approximates 16,000 tons. This would be divided into the different classes of olive products handled by the industry as shown below:

	Tons.
Ripe canned olives	7,000
Black ripe olives (Greek style)	1,500
Green olives (usually sold in New York and other Atlantic coast centers, being shipped in brine and further processed by the purchaser)	500
Olive oil	7,000
Total	16,000

There was a period in the domestic olive industry during which growers, through discouragement over low prices received for their olives, proceeded in large numbers to graft over the oil varieties to those suitable for ripe canning purposes. This movement followed and seemed to be influenced by the failure of the domestic olive producers to secure what they considered an adequate duty on olive oil. Consequently, during the time the grafted trees were making the new growth there was an appreciable falling off of the crop.

The 1920–21 olive crop, now being handled, falls below the normal expected output because of an almost total failure of the olives to "set" on the trees in the southern part of California. It is expected that the crop will be utilized in the following manner:

	Tons.
Ripe canned olives	3,000
Black ripe olives (Greek style)	1,200
Green shipments	1,000
Olive oil	4,500
Total	9,700

11. *Reduction of former duty of no benefit to consumer.*—The reduction of the duty on olive oil from 40 cents a gallon in bulk to 20 cents a gallon, under the present law, never benefited the consumer of olive oil in this country in the slightest degree. The retail price of olive oil was not reduced following the enactment of this law, and it was not to be expected that the lower duty would mean a correspondingly lower price to the consumer. Olive oil, when sold in glass and tin containers at retail, in many instances in quantities less than a gallon, is not priced to the consumer at fractional figures giving him the benefit of the lowered duty. In practice the dealer maintains his former price in the round number and whatever benefit is derived from the reduced duty is secured by the importer, or by him divided with the jobber or distributer, if this course seems necessary to hold trade.

12. *Loss of revenue to Government.*—On the other hand, the loss of revenue to the Government through the reduction in the olive oil rate has been only too well demonstrated. On every gallon of oil imported the Government lost the difference in duty, amounting in the six years from 1914 to December 1, 1920, to $8,269,079, and this loss has not been and we believe will not be compensated for in the future by the doubling of imports of this article. At any rate, the increase in imports of olive oil is not contingent upon a reduction in the duty, for the growing demand in this country for this article will for a great many years require the importation of supplies, and under any fair rate of duty the revenue derived by the Government on this item will be very materially increased.

13. *Increased revenue under proposed rate.*—The securing of additional revenue is a matter of prime importance at this time in view of the probable reductions that will be made in certain other forms of taxes. Under the duty on olive oil asked herein, and taking the import figures of 1919 as a basis, the increased revenue would amount to $3,320,756 annually.

14. *Tariff uncertainty retards progress of industry.*—Since the passage of the present tariff law, in which the duty on olive oil was cut in half, the planters of olives in California and Arizona have lost all incentive to plant those varieties of olives which are best adapted to the making of olive oil. Likewise, during this period, a great many of the olive groves producing the purely oil varieties, such as the Nevadillo, Pendulina, and Picholine, have been grafted over to the Mission and Manzanillo varieties of olives—these being the most satisfactory for ripe canning. Thus, the lack of confidence in the future of the domestic olive oil industry occasioned by the reduction of the duty has definitely retarded the development of this branch of the domestic olive industry.

15. *Cost of establishing an olive grove.*—In 1915 and 1916 a State-wide investigation in California covering the cost of planting and bringing an olive grove into bearing disclosed the fact that the total average cost of establishing an orchard was $611.06 per acre. The items of expense were:

	Per acre.
Raw land	$150.00
Clearing and leveling	30.00
Irrigation rights	30.00
Irrigation system	15.00
Trees (48)	32.00
Planting	7.50
Pruning expense (6 years)	15.00
Fertilizer expense (6 years)	10.00
Cultivating and irrigating expense (6 years)	120.00
Water assessment or cost (6 years)	36.00
Taxes (6 years)	12.00
Incidental expense (6 years)	20.00
Interest on investment (6 years, at 6 per cent)	133.56
Total	611.06

16. *Comparative cost in Spain.*—As showing the difference in investment, cost of production, and manufacture, between foreign olive-producing countries and California, we will use figures available for Spain, since that country, being the largest producer of olives in the world, is representative of the general conditions prevailing in European olive-growing sections.

The following figures are from Consular Report No. 79, by Wilbur T. Gracey, American consul at Seville, Spain:

Area growing in 1916	acres..	3,704,905
Average value of raw olive land	per acre..	$33.00
Average value of bearing olive lands	do....	$113.33
Average production per acre	pounds..	1,067
Average gross return per acre		$12.50

17. *Cost of production in United States (prewar conditions).*—In California, as previously shown, the investment per acre in olive groves is $611.06, and the average annual production per full bearing acre, including good orchards and poor ones, is 2,000 pounds. The total expense in producing a 1-ton crop per acre in California is itemized as follows:

Plowing and cultivation, per acre	$13	Fumigation and spraying	$3
Irrigation labor	7	Sundry labor	3
Cost of irrigation water	6	Taxes	8
Fertilization	18	Small equipment and renewals	3
Pruning	8		
Harvesting	30	Total	99

18. *Ripe olive saves industry.*—The domestic olive industry was originally founded on the idea that olives could be produced successfully for oil purposes in competition with the foreign article and it has cost those engaged in the business dearly to learn otherwise. Had it not been for the discovery some years ago that certain varieties of olives grown here could be processed ripe and preserved by canning, on a commercial scale, California and Arizona would have no olive industry to-day. This discovery gave us a new and distinctive product, possessing great merit both as a food and a relish, and, as ripe canned olives are not produced to any extent elsewhere, the lack of competition for the present has allowed us to make an occasional profit in growing and canning this ripe fruit.

19. *Ripe olive carries oil burden.*—While this new feature of the olive business opened up great possibilities for the future development of the industry, it did not solve all our problems, as approximately one-half of the olives grown primarily for ripe canning must be used in making oil, because only the larger sizes of olives and those perfectly sound in every respect can be utilized commercially in the ripe canned product. All olives smaller than nine-sixteenths of an inch in diameter must find a market in the form of olive oil, as well as all fruit, of whatever size, which lacks the prime quality necessary for ripe processing. In years of normal production the percentage of the crop which must be used in forms other than the ripe canned olive is, as already stated, about one-half of the entire production.

Under normal trade conditions, when we are obliged to meet keen competition from imported olive oils, and with the handicap of a low tariff, this forced manufacture of this amount of olives into olive oil has actually constituted a burden upon our ripe olive canning industry, since, under the conditions named, our oil has been manufactured and sold at a loss. Mainly on account of this drawback to the ripe olive industry, no packer handling olive products solely has made a profit commensurate with his investment, except in those cases where the packer had been enabled to purchase his olives at prices that meant a loss to the grower.

TABLE I.—*Imports of edible olive oil entered for consumption into the United States, 1900–1919, inclusive.*

[Figures from Bureau of Foreign and Domestic Commerce.]

IN BOTTLES, JARS, TINS, AND SIMILAR PACKAGES (LESS THAN 5 GALLONS).

Year.	Rate of duty.	Quantity.	Value.
1900	50 cents per gallon	867,123	$1,085,426
1901	do	859,369	1,168,952
1902	do	1,140,054	1,454,899
1903	do	1,253,975	1,557,661
1904	do	1,364,590	1,633,891
1905	do	1,559,583	1,836,941
1906	do	1,812,392	2,113,590
1907	do	2,380,508	2,724,490
1908	do	2,598,403	3,018,595
1909	do	2,611,853	3,049,382
1910	do	2,370,997	3,574,979
1911	do	2,848,949	4,227,651
1912	do	3,050,944	4,336,189
1913	do	3,090,125	4,410,808
1914	do	698,864	980,865
1914	30 cents per gallon	3,446,710	4,795,635
1915	do	4,272,411	5,705,549
1916	do	4,059,680	6,664,355
1917	do	3,140,085	5,262,509
1918	do	621,728	1,241,346
1919	do	1,061,684	2,691,722
Total		45,118,777	63,455,611

(During the 11 months of 1920 ending Nov. 30, the edible olive oil imported into the United States, in bulk and in packages of less than 5 gallons, amounted to 3,884,815 gallons. The value of this oil is given at $10,596,636.)

Average value per gallon to Dec. 31, 1914 (prewar) $1.23
Average value per gallon to Dec. 31, 1919 (including war period) 1.494

OLIVE OIL IN BULK (CASKS, ETC.).

Year.	Rate of duty.	Quantity.	Value.	Total imports (gallons).
1900	40 cents per gallon	100,657	$85,522	967,780
1901	do	132,432	111,230	994,301
1902	do	191,680	152,227	1,334,734
1903	do	230,173	177,091	1,484,148
1904	do	325,755	241,120	1,690,145
1905	do	314,403	234,692	1,873,986
1906	do	553,057	422,238	2,365,419
1907	do	736,551	562,926	3,126,050
1908	do	950,245	715,124	3,548,648
1909	do	1,116,532	1,128,151	2,728,385
1910	do	1,226,955	1,242,433	3,597,952
1911	do	1,344,593	1,572,084	4,193,542
1912	do	1,709,923	1,729,491	4,760,857
1913	do	1,682,638	1,816,723	4,772,763
1914	do	351,229	373,304	1,050,093
1914	20 cents per gallon	1,895,021	2,042,026	5,341,731
1915	do	2,350,943	2,414,790	6,623,354
1916	do	2,864,930	3,259,988	6,924,590
1917	do	4,586,409	5,506,486	7,776,494
1918	do	1,910,794	2,694,071	2,562,522
1919	do	7,240,206	13,676,263	8,301,980
Total		31,828,156	40,177,970	76,946,982

Average value per gallon to Dec. 31, 1914 (prewar) $0.781
Average value per gallon to Dec. 31, 1919 (including war period) 1.26
Average value per gallon of oil in bulk and small packages to Dec. 31, 1919 (prewar) 1.23
Average value per gallon in bulk (and small packages to Dec. 31, 1919, including war period) 1.34

Total loss of revenue on importations since present tariff became effective, $8,269,079.20—being at the rate of 20 cents per gallon on total imports of 41,345,396 gallons to Dec. 1, 1920.

20. *Sources of olive oil imports.*—The bulk of the olive oil imports received in this country comes from Spain, Italy, and France. By far the larger part comes from Spain and Italy, and in normal times Italy was the heaviest exporter of olive oil to the United States. At the present time Spain has a greater surplus of oil than has Italy, and during the year 1920 most of the olive oil imported has come from the former country. During the war Italy's olive industry suffered for want of workers, who were either in the army or else were engaged in work that was necessary to supply the troops in the trenches.

Now, however, Italy is restoring her industries and may be expected to enter upon the exporting of olive oil with the advent of the first large crop. It is needless to dwell upon the fact that the very low rate of Italian exchange existing will prove a strong incentive to sell Italian oils in the United States.

At the earliest moment that extensive exporting of olive oil is permitted by the Spanish Government we may look for greatly increased shipments to this country, since Spain has now a surplus of oil.

21. *Ripe olives and olive-oil making are inseparable.*—In California and Arizona the manufacture of the ripe olive (the product of greatest commercial importance at the present time) is inseparable from the making of olive oil, as it is impossible to control the production of olives in such manner as to avoid the necessity of utilizing approximately 50 per cent of the crop in products other than the ripe canned fruit. The greater part of this tonnage unsuited to the ripe process is now made into olive oil.

It is therefore a fact that the growing and manufacture of the ripe canned olive is affected very materially by the conditions which may prevail in the olive oil market, and because of this it is deemed necessary to the development of the ripe olive industry itself that a protective duty be placed on olive oil so that the manufacture of this article will not, as was the case in normal times, prove a burden on the ripe olive business through the losses sustained in meeting the low prices of foreign oil.

22. *Effect of exchange rates.*—Any dislocation in exchange ratios, for some considerable time after the dislocation, results in a relative reduction of productive costs in the countries against which the exchange is running and the effect of the depreciation in exchange ratios in olive producing countries, as compared with the United States, enables exporters of olive oil from those countries to undersell the American producers.

Based on a price of $3.50 per gallon, New York, the exchange rate as of to-day would establish the following differentials in favor of the foreign oil producers, as against the California producers: 31.93 per cent if imported from Spain, 58.33 per cent from France, 61.93 per cent from Greece, and 81.61 per cent from Italy. The only possible protection, in view of the present ratios of exchange, lies in an increase in the import tariff to protect the home product.

23. *Prewar cost of producing Spanish olive oil.*—Consul Robert Frazer, jr., writing from Malaga, Spain, March 11, 1914 (Daily Consular and Trade Reports), says:

"The prices obtained by the factories (Spain) for their edible oils vary greatly from year to year, having within 15 years ranged from $4.61 to $11.36 per hundred pounds." According to these figures the average price received by the factories for the 15-year period is $7.98 per 100 pounds, or 61 cents per gallon (a gallon of olive oil weighing 7.61 pounds). Allowing 30 cents a gallon to cover cartage, wharfage, Government tax, consular invoice charges, insurance and transportation, which is very liberal, the total cost of landing olive oil in this country in bulk would be 91 cents per gallon.

In further confirmation of olive oil values in Spain, we quote Consul W. T. Gracey, writing from Seville on February 19, 1918, wherein he says that the price of oil in December, 1917, was 80 reales, against a normal price of 40 to 45 reales per arroba. This normal price is equivalent to about 64 cents a gallon.

Again, our consul at Malaga, Spain, under date of June 10, 1919, writes that the Spanish food ministry had fixed a maximum price of 87 cents per gallon for olive oil to be held for domestic use. This, of course, was a war price and indicates that under normal conditions the olive oil prices would approximate 60 to 65 cents a gallon.

Prewar cost of manufacturing olive oil in California (per gallon):

Fruit, per gallon (olives at $40 per ton, 35 gallons to ton)	[1] $1.144
Cost of manufacturing, including labor, supplies, wear and tear on machinery and buildings, insurance, and overhead	.486
Total cost per gallon	[1] 1.63

By the season of 1919 the costs had advanced to $2.61 per gallon.

NOTE.—These high costs, it is believed, are temporary, hence prewar figures only are used as the basis for determining the difference between the cost per gallon of producing foreign and domestic olive oils.

[1] These figures apply to olive oil in bulk; packing and containers are not included.

24. *Duty necessary to equalize production costs.*—Comparing the costs of imported and domestic oilve oil in bulk, it is evident that if the California and Arizona olive industry is to have a chance to compete wtih the imported oil, a duty of not less than 60 cents a gallon is required.

25. *Value of imported oilve oils.*—Government statistics show that from 1900 to and including 1914 the imports of edible oilve oil amounted to 44,828,083 gallons, having an invoice value of $1.23 a gallon.

This figure includes the oilve oil brought in in containers of less then 5 gallons, the same amounting to 31,963,239 gallons. In California the cost of packing the oil in 1-gallon containers will add 35 cents a gallon to the figures shown for our bulk oil of $1.63, or a total of $1.98. Assuming that the packing cost in foreign countries approximated this figure, the difference between the cost of landing olive oil in bulk in this country (91 to 96 cents) and the value of the imported oil, as shown by Government statistics ($1.23) (73 per cent in small containers), is accounted for.

26. *Imports of olive oil increase regardless of rate of duty.*—It has been contended that an increase in the duty on olive oil will curtail importations, thus reducing the revenue to the Government. Ever since records of imports of oilve oil have been kept in this country it is to be noted that shipments of olive oil have increased with the growth of our population, regardless of the tariff duties in force.

In 1917 the importations were between seven and eight million gallons, which is an amount equivalent to approximately one-twelfth of a gallon per capita of our population. We claim that in a country as rich as ours the annual consumption of such a valuable article of food as is olive oil should be greatly increased.

27. *Quality of California olive oil.*—California olive oil won the first prize for the best grade of oil at the Panama-Pacific Exposition in competition with the highest grade olive oils from France, Italy, and Spain.

Analyses of high-grade California olive oils and imported olive oils made by Prof. J. S. Horn of the University of California show the acidity content of the California oils to be lower than that of the imported oils.

California olive oil is made in modern mills and under the most sanitary conditions, while much of the imported oil is made in crude, antiquated home plants under conditions woefully lacking in sanitation.

28. *Duty asked on mechanical olive oil.*—A duty on mechanical olive oil will be a source of additionsl revenue (this oil now comes in free, under Paragraph 561 of the Free List of the Tariff Law of October 3, 1913).

If the duty asked for (20 cents per gallon) on mechanical olive oil is allowed, it will make it possible for the California and Arizona olive oil manufacturers to save this oil which is now wasted. The expensive machinery needed for the extraction of this oil and the cost of operating same makes the cost of saving this valuable product prohibitive in the face of the low prices at which the imported article can be sold.

TABLE II.—*Imports of mechanical olive oil for years 1912–1919, inclusive (duty free).*

[Figures furnished by Bureau of Foreign and Domestic Commerce.]

Year.	Gallons.	Value.
1912	759,237	$409,444
1913	563,819	308,814
1914	747,917	474,041
1915	631,501	434,628
1916	844,585	681,423
1917	396,815	509,334
1918 (practically none imported owing to war conditions)	357	140
1919	282,454	435,190
	4,426,085	3,437,784

Average value per gallon for entire period $0.77.7
Average value per gallon for three-year period ending Dec. 31, 1914 (prewar) 63.4

29. *Labor costs, foreign.*—The labor cost of producing olives in the Mediterranean countries previous to the war was very low. At that time orchard workers in Spain received from 2 to 5 pesetas per day (normal exchange 38 to 96 cents United States). Advices from the American consul at Valencia, Spain, on August 7, 1920, indicated that wages at this later period ranged from 5 to 12 pesetas per day (present exchange 15 cents to $1.56 United States). In many of the olive-growing districts of foreign countries women and children perform a large part of the work of gathering the fruit. The

American consul general's office at Barcelona, Spain, under date of October 4, 1919, furnishes figures covering the wages per day received by such workers as follows:

Year.	Pesetas.	Equivalent in United States currency.
1914	2.25	[1] $0.43
1915	3.00	[1] .58
1916	3.25	[1] .627
1917	3.50	[1] .675
1918	3.75	[1] .72
1919	4.00	[1] .77

[1] Normal exchange.

In the Spanish olive-oil factories, where mostly men are employed, the daily wages paid during these years were as follows:

Year.	Pesetas.	Equivalent in United States currency.
1914	3.50	[1] $0.675
1915	3.50	[1] .675
1916	3.75	[1] .72
1917	4.50	[1] .86
1918	5.25	[1] .101
1919	6.00	[1] .116

[1] Normal exchange.

In the Catania district, Italy, before the war men workers in he olive industry received lire 3 per day (58 cents United States) and women were paid lire 1.50 (29 cents United States). In October, 1919, these wages had advanced to lire 7 per day for male workers ($1.35 United States) and lire 4 to 5 (77 to 96 cents United States) for female employees. (Figures based on normal exchange.)

The district of Nice, in France, producing considerable quantities of olive oil for export in normal times, had previous to the war, the same low scale of wages paid to labor as obtained in Spain and Italy. Here, as in many other foreign olive-growing sections, the groves are owned largely by the peasantry and much of the labor of production is performed by the owners and their families. In many instances there are no wages at all paid for handling the crop. In the Nice district the prewar wages for orchard work, when paid, averaged from 3 to 4 francs per day (58 to 77 cents United States). In 1919 these wages were much higher, but the exchange rate has fallen in equal proportion.

30. *Labor costs, domestic.*—During the period mentioned herein (1914–1919) the labor cost of producing olives in California and Arizona has kept pace with the increase n all commodity prices which took place in these years. In 1914 orchard help (practically all orchard work in the domestic olive industry is done by male workers), was paid an average of $2 per day. Skilled male workers in the factories received $3 per day. Women workers in the factories were paid $10 to $12 per week. In 1919 orchard workers were paid $3.50 to $4 per day, skilled help in factories, $4.50 to $5.50 a day, and the wages of female factory employees, by State law, has been established at $16.50 minimum for a week of 48 hours.

31. *Foreign rates, transatlantic.*—In the matter of freight rates the American olive industry has always been at a distinct disadvantage as compared with the foreign industry.

From figures applying to shipping conditions in the latter part of 1919 it is shown that the average cost, including all items of expense, of transporting a gallon of olive oil from the factory at Tarragona, Spain, to New York was 0.26 peseta, or about 5.04 cents United States.

Previous to the war it cost but 2.23 cents per gallon to transport olive oil from Messina, Italy, to New York.

The total cost in 1919 of shipping olive oil from Nice, France, to New York, including transhipping at Marseilles, was approximately 8 cents per gallon. In 1914

the total freight charges for transporting olive oil from Nice to New York was approximately 4.3 cents per gallon.

32. *Freight rates, domestic.*—The cost of shipping olive oil from California to New York or Chicago, under present rates, in carload lots, is $1.66¼ per hundred pounds, and this expressed in terms of gallons represents a cost per gallon of 15.6 cents.

The olive industry of California and Arizona gains no advantage by shipping through the Panama Canal, since the bulk of the olive oil shipped East is sold in the region surrounding Chicago, and the cost of transshipping from Atlantic ports would offset any saving that might be effected through shipping by water.

33. *Implements and supplies.*—Not only in the item of labor is the domestic olive producer placed at a great disadvantage when competing with the foreign grower, but also in every other item in which the product of labor is a factor, such as farm implements, fertilizers, and other supplies. The domestic manufacturer of olive oil is equally affected by the difference in cost of all supplies and equipment which cost his foreign competitor materially lower prices to purchase.

34. *Domestic grower can not live on low standard of foreign competitor.*—With cheaper labor (much of this being done by the owner's family), lower investment in bearing groves and equipment used in maintaining them, and living on a plane to which it would be impossible for the American olive grower to descend, the foreign producer of olives and olive oil has always been able to undersell his American competitor. He is able to-day to sell at materially lower prices than the American grower can afford to accept and continue to produce olives, and he wil , in the future, be a le to put his product in this market at prices which mean a loss to the American olive grower and manufacturer unless there is a duty placed on olive oil which will equali e the cost of production and manufacture here and abroad.

35. *Imported olive oils now selling at lower prices.*—While olive oil had been selling at what has been considered high levels (between $3.50 and $4.50 per gallon to the jobbing trade), during the past two years, because of conditions growing out of the war, the tendency of prices is now decidedly toward levels, thus removing that measure of temporary protection which the domestic olive-oil industry was afforded by the comparative scarcity of this article.

Quotations on imported olive oils published during the early part of January, 1921, show that best grade Spanish and French oils were selling to the trade in New York at prices ranging from $2.60 to $3.10 per gallon, and the statement was made in the New York Commercial that the near future would see imported olive oil selling around $2 per gallon. If compelled to meet this latter figure, or even those mentioned as prevailing early this month (January, 1921), the producers of domestic olive oil must sustain a heavy loss.

36. *Only California and Arizona can produce ripe canned olives.*—Only in California and Arizona can olives be grown commercially in this country, but in these two States there are lands available for planting, and suited admirably to the culture of olives, through the fortunate combination of soil and climate, which, if set out to this fruit, would produce annually a large proportion of the olive supplies used by the people of this country and could, in time, we believe, be so extended as to furnish all the needs of our people.

37. *Great possibilities of expansion.*—It has been ascertained through investigation of sites possessing the essentials of soil, climate, and irrigation that California and Arizona could to-day plant from a half million to a million acres of olive trees, if the investment necessary to this development could be assured safety by a tariff policy which would afford protection to our growers and packers from ruinous competition, until our industry is more firmly established.

38. *Oil branch of industry must be protected to enable ripe olive industry to develop.*—So long as the manufacture of olive oil in California and Arizona is attended by a loss—or, at best, with no profit—not only the domestic olive oil industry must languish but the potentially great ripe olive industry of these States must also be retarded. Olive oil being a necessary adjunct or part of the ripe olive industry, this latter can only expand and thus reap the advantage of its peculiar and distinctive product if the burden of unprofitable oil production is removed by the increased duty requested at this time.

39. *Domestic olive industry could supply large part of country's needs.*—Given the relief which our olive producers ask in the form of an adequate duty to protect their investments, the olive industry of California and Arizona will be encouraged to develop its great natural (and exclusive) resources to an extent which will make the manufacture of olive oil in this country an important business capable of supplying much, if not all, of this country's growing needs for this article of food. Such assistance as asked in a higher duty on oil will, through affording a profit on a product which in normal times proves a necessary burden on the ripe olive industry, relieve this

latter and allow our growers and manufacturers to develop this business until the ripe canned olive becomes established in the markets and its use as general as that made of other canned food products of its class in this country.

40. *Olive growers subsidized by French Government.*—The French Government has taken a great interest in the development of its olive industry, and especially in its colonial possessions. In its Tunisian colony, in northern Africa, in the years between 1892 and 1904, lands were sold in the Sfax area for 75 cents an acre, the purchaser agreeing to plant the land to a tree crop within four years. Two hundred thousand acres of public lands were thus acquired by French stock companies and individual colonists in the above-named period. On a portion of these lands more than one and one-half million olive trees were planted.

This extensive planting within such a short period and under the stimulus of Government aid is an illustration of the development which may be accomplished in this country, provided we have the assistance of the Federal Government, not in supplying us with cheap lands, but by a tariff rate that will allow us to compete with the foreign oil producer on an equal basis, under which conditions we will be able to build up our industry to very large proportions.

41. *Protection of industry means increased wealth to Nation.*—The rate of duty asked by the olive industry of California and Arizona on olive oil is one that will hardly equalize the costs of production of this article here and in the Mediterranean countries, and we maintain that the increased duty asked is justifiable on the grounds that our industry is an American enterprise, possessing all the natural qualifications that make for its development; that such development, if aided by legislation that will allow our producers to compete on an equal basis with the foreign producer, will make steady progress to the limits of our large, available resources, and by this growth of our olive industry our growers and manufacturers will be enabled to supply in large part the needs of this country for olive products, give profitable employment to large numbers of our people, and, through the diffusion of the wealth thus created, add in substantial measure to the material resources of the Nation.

FRANK SIMONDS, *President.*
J. J. HOEY, *Secretary.*

Which association, incorporated under the laws of California as cooperative, nonprofit, includes in its membership 825 individual olive growers, representing 70 per cent of the planted olive acreage, and 15 olive packing firms, with an aggregate output of 80 per cent of the total olive pack of California.

NEW YORK, *January 10, 1921.*

GENTLEMEN: We are an American concern, with headquarters at New York City, established over 30 years, importing food products, principally from France, Belgium, Italy, and Spain.

Before the customs tariff act of October 3, 1913, went into effect, we were importing olive oil in bottles and tins from Leghorn, Italy, and Nice, France. In the former place we owned a factory outright, and in the latter place we leased a large factory and had a very important organization

In view of the rate of 20 cents per gallon duty on olive oil when imported in bulk into this country under the present tariff, we concluded we could import this article in bulk, can and bottle it in this country, and still compete with olive oil which had been canned or bottled abroad, as the latter was compelled to pay 30 cents per gallon duty under the same act.

With this in mind we disposed of both of our plants abroad, the one in Leghorn immediately, and the one in Nice later on, and have since been bottling and canning olive oil in this country. At present we have an important plant in the Bush Terminal Building, Brooklyn, N. Y., equipped with large American porcelain-lined tanks, filtering and pumping machines, etc., all of which represents a considerable investment.

This new method of bottling and canning our oil here instead of abroad means employment of American men and women, not only in our plant, but in the factories that furnish us the supplies, such as olive-oil cans and spouts, olive-oil bottles, capsules, labels and straw coverings for same, and the outside shipping cases, all of which are very important industries, as well as the furnishing of employment to our citizens in the manufacture of the olive-oil tanks and the olive-oil machinery above referred to.

As an instance of the importance of this business just with our own concern, we might add that in 1914 we paid the American Can Co., of our city, $4,226 for the olive-

oil tins we used during that year, and in 1919 the business had increased to such an extent that we paid them $40,645 for tins used during that year. We would be able quite readily to show you similar increases for the other supplies mentioned.

Before the war American cottonseed oil was shipped in very important quantities to France, Italy, and Spain, for consumption by the common people. During the war on account of the increased price of this article, high freight rates, high war risk insurance and marine rates, also on account of lack of transportation, the exports of this article became very much reduced, and the home-grown olive oil was used in those countries by people who previously could not afford it. The war has made many changes in business, and we now find olive oil being more generally consumed in the countries just named than heretofore.

On account of the demand abroad for olive oil the prices for 1920 have been very high, almost prohibitive, and the business has fallen off in this country appreciably. If the American tariff was removed entirely on this article at present the American bottlers and canners of olive oil would still find considerable difficulty to do business on account of the high prevailing prices for this article. Our own factory for the last six months has been working on part time; in fact we have only averaged during that time two days' work a week.

A very important matter also to be considered at this time with those foreign countries is the export business we enjoyed before the war on cottonseed oil, and it must be quite apparent that a high protective American tariff, which will reduce the imports of olive oil to this country, will proportionately increase the consumption of olive oil in the producing countries, and likewise curtail the demand for our own American cottonseed oil.

Olive oil is no longer to be considered a luxury in this country. It is a necessity, and we respectfully submit should be so considered when framing the tariff. The people of this country should not be compelled to pay exorbitant prices for an article which this country can not produce except in very small quantities, so small in fact that the quantity of domestic oil produced is not sufficient for the consumption of the State in which it is produced, i. e., California, as that State itself imports more foreign olive oil for the consumption of its people and use in its canning industries than is there produced.

We respectfully request that all of the above be carefully considered should there be any revision of Schedule G, and we pray that the present rates be permitted to stand in the event of a new tariff, in the interest of all concerned.

LA MANNA, AZEMA & FARNAN.

PEANUT OIL.

[Paragraphs 45 and 560.]

BRIEF OF THE UNITED PEANUT ASSOCIATIONS OF AMERICA, NORFOLK, VA.

This brief is filed on behalf of the United Peanut Association of America, an organization composed of peanut growers, mill men (peanut shellers and crushers), and other interests identified with the manufacture of peanut products. Its membership embraces the largest interest identified with the cultivation and manufacture of peanuts and peanut products in the States of Virginia, North Carolina, Tennessee, South Carolina, Georgia, Florida, Alabama, Texas, Oklahoma, Louisiana, Mississippi, and Arkansas.

A great industry has been built up. New uses have been found for peanuts and peanut products, until it has assumed rank among the Nation's great products. Peanut-oil refineries have built up a trade for peanut oil among American people. Peanut-butter manufacturers and packers of salted peanuts have advertised and pushed their products to the front, and have built up a trade of enormous proportions.

In a very large section of Georgia, Florida, Alabama, Texas, and this past year the State of South Carolina was added to the list, the boll weevil has made the raising of cotton almost out of the question. The farmers have found peanuts their salvation as a substitute crop. It has been demonstrated that these boll weevil infested sections can not produce cotton, as some of the farmers became disgusted with the peanut market slump in December, 1918, and reverted back to cotton. And these people who did this proved conclusively that the boll weevil has come to stay.

The domestic acreage increased from 809,887 acres in 1909, to 1,268,000 acres in 1920.

The domestic peanut oil industry is in a life-and-death struggle. Unless relief is given by protecting it against the cheaply produced product from the Orient, the last days of the peanut-oil industry are being written into history. It absolutely can not survive the present catastrophe without protection.

ACT OF 1921 (H. R. NO. 2321)—ITEMS AND PARAGRAPHS IN WHICH INTERESTED.

Free list. Paragraph 560, oil cake.
Paragraph 45. Oils, expressed. * * * Peanut oil 6 cents per gallon * * *.

CHANGES RECOMMENDED.

The United Peanut Association of America respectfully requests from Congress the including in the proposed tariff law a duty of 5 cents per pound on crude oil and 6 cents per pound on refined peanut oil, and 2 cents per pound on peanut oil cake and meal.

REASON FOR SUCH RECOMMENDATIONS.

We ask that oil cake be taken out of the first list and be made dutiable at 2 cents per pound, because it forms a considerable part of the product to be obtained from peanuts. It is the residue of peanuts after the oil has been extracted. From a ton of farmers' stock of peanuts, there will be an average of about 1,300 pounds of oil cake.

We ask that the duty on peanut oil, crude, be raised from 6 cents per gallon to 5 cents per pound and refined peanut oil be added with a rate of 6 cents per pound, because of the difference of cost of production in the United States and foreign lands. There is a great difference both as to the cost of producing peanuts and extracting oil, when compared with the costs of production in the United States.

In support of our request we beg to submit to you the following facts:

First, that the peanut industry is an essential one.

Second, that peanut oil is essential in our food supply.

Third, that the prosperity of a large number of our citizens depends upon a tariff being placed upon this production.

Fourth, that a large section of our lands is engaged in the production of peanuts.

Fifth, that the unrestricted importation of peanuts, peanut oil, and cakes is detrimental to the successful operation of the production of peanuts and the manufacture of same.

Sixth, that the peanut oil imported from the Orient is undesirable from the standpoint of health.

We herewith give you a short résumé of the peanut industry.

The production of peanuts is largely confined to that area of our country, largely in the southern part, and produced upon land that is unsuitable, on account of the boll weevil, for the production of other crops. The planting of peanuts for the production of oil was undertaken about the year 1914, and the fact was ascertained that this crop could be produced upon a profitable scale if a reasonable price was secured for the oil and the cake. This production was encouraged by both the United States Department of Agriculture and the State departments of agriculture, and year by year a large investment has been made in this industry and at the present time there are located factories for the manufacture of oils and cake at various points throughout the country, and to indicate the rapid growth of this industry there was produced in the year 1919 over 87,000,000 pounds of oil. The success of this industry is largely due to the desirability of the products produced and the demand for same among the people of this country and further, in so much as this demand has increased year by year, it is reasonable to assume that this industry will continue to grow and reach large proportions, thereby affording employment for large numbers of people, both in agricultural and manufacturing.

In our opinion the only detriment and the only disaster that will overtake us in our endeavors is the unrestricted competition of oriental oils, and in making this statement, it is from experience that we are now undergoing, and it is from this oriental oil that we ask protection. We first wish to point out to you the conditions under which this oriental oil is produced. From the best of our investigations the farming in the Orient is accomplished by individuals who live in abject poverty and filth, who harvest their crops, storing them in their habitations, and the entire process is by hand. These nuts, upon being shelled, are conveyed either to small native mills or to some of the larger mills, and there the oil is extracted by coolie labor who, in numbers of cases, are suffering from the most contagious of Asiatic diseases.

The usual container in which the oil is shipped is a can that has previously contained kerosene, which can has also probably resided for months in the most insanitary atmosphere that can be found in the world. To make ourselves plain, the cans

arriving in this country containing this, presumed to be, edible oil, has been shipped to the Orient containing kerosene, and which cans containing kerosene have been delivered into the oriental household and there remain for an indefinite length of time. From this statement of conditions I do not believe it will be necessary to call upon your imagination to see that no plant under the State or Federal health laws would be permitted to produce an alleged edible product, and therefore, as such conditions are not permitted in this country it is not fair that we should be asked to maintain our standard of living and compete with the productions of the oriental standard.

We also call attention to the efforts being made by the nationals of one of the Asiatic countries to dominate and to permanently remain in this business in this country, and to accomplish this they have constructed large receiving tanks at certain ports and, we are informed, grant special inducements in the shape of exceedingly low ocean freight rates on their vessels transporting this oil. Further, they are maintaining within the United States a large sales organization for the distribution of this material.

APPENDIX A.

Previous to year 1912, most of the imports of peanut oil came from France. Beginning with that year China and Japan have shown a very aggressive attitude and have sent us the bulk of imports: The Department of Foreign and Domestic Commerce, United States Department of Agriculture, furnishes us the following figures of importations of peanut oil, mostly from China and Japan:

	Gallons.
1912	985,587
1913	1,195,683
1914	1,337,136
1915	852,905
1916	1,476,123
1917	3,026,188
1918	8,288,756
1919	11,392,724
1920	22,064,363

The value of the 1919 importations is reported by the same authority to be $11,495,849; the 1920 importations, $27,795,560.

We obtained the following data on domestic production of peanut oil; we have added the imports as comparison:

	Domestic.		Imports, gallons.
	Pounds.	Gallons.	
1912	454,000	60,533	985,587
1914	1,006,000	134,133	1,337,136
1916	28,534,000	3,804,533	1,476,123
1917	50,287,000	6,704,933	3,026,188
1918	95,094,000	12,791,200	8,288,756
1919	87,216,869	11,762,247	11,392,724
1920			22,064,363

From the above it will be seen that imports have made a healthy growth and in 1920 reached to more than double the domestic production of 1919.

Exports of peanut oil.

	Pounds.	Gallons.
1912	7,000	933
1914	90,000	12,810
1916	171,000	22,800
1917	145,600	19,333
1918	75,000	1,000

It is evident from these reports of the export trade of peanut oil that there is very little outlet and that the domestic market has been taking and consuming most of the domestic production as well as all of the imports.

Cottonseed, soya beans, and peanut oil are interchangeable with peanut oil in the manufacture of many products, hence, they have a relation, that compels equality in price.

APPENDIX B.

The importance of the preservation of the peanut industry to the United States might be stated in value of money invested and the number of people affected, what it has done for the farmer and what the possibilities for the future contain.

Capital invested.

Value of farm lands devoted to the culture of peanuts, taking the United States Government's crop estimate reports of acerage for 1920, valuing the land at an average of $70 per acre	$88,362,000
Value of special farm implements required for culture and harvesting of peanuts, approximately	7,700,000
Value of equipment of peanut mills, shelling and crushing machinery, real estate buildings, storage warehouses, etc	11,500,000
Capital invested in manufacturing establishment, for manufacture of peanut pickers and other special farm implements	750,000
Total	108,312,000
Number of people employed in the mills, shelling, cleaning and crushing establishments	10,500
Number of farmers (head of families) estimated to be engaged in the production of peanuts in the United States	121,000
Total	131,500
Number of acres, estimated, in the South that is adaptable to culture of peanuts, and can thus be utilized if a market is available for the product, see map attached	9,340,000

In the South it is estimated that there are approximately 9,340,000 acres of land that will produce peanuts. Some of this land is suitable for other crops, but there are many sections of land that are not being used that can be devoted to production of peanuts. (See map on file with Committee.)

The Spanish peanuts is not so choice about the land, more than it should be light soil, and will grow and make good production where other crops will fail.

No American would be satisfied to live as do the Asiatics, and unless we want our standards brought down to their level, we must place barriers up so that their products can not drive our people out of business.

The committee's attention is again invited to the sudden growth of imports, years 1919 and 1920. From a gentleman who addressed the U. P. A. of America Convention at Norfolk, Va., July 13, we learn the reason of this growth. That is the unlimited acerage that can be brought under cultivation in China, especially in the sections where peanuts and soya beans are produced. This land can be purchased for what is in United States currency about $12.50 per acre. All that is needed is for the Chinaman to know that there is a market for his peanuts and peanut oil. If given the opportunity, China could in time produce all the vegetable oil needed by the entire world.

The whole question in a nutshell, from our point of view, is that the enormous volume of Oriental importations of peanut oil should pay a tariff tax of at least 5 cents per pound, first, to protect the peanut industry of the United States, and second, to produce revenue for our Government.

APPENDIX C.

Mr. Paul Jernigan, spent several years in China as a representative of one of our large American corporations. He addressed the convention of the United Peanut Associations held at Norfolk, Va., July 12–13, 1920, and the following quotations are taken from his talk:

"The Chinese farmer is what we call an intensive farmer at home. They don't attend large tracts of land like some of our farmers; they only have a little parcel of land.

"I have noticed in their planting and raising of peanuts they only have a little patch here and there throughout the country and they don't depend upon labor as we do. They don't hire coolies as we call them. The coolie is employed in China

more or less as a rickshaw or beast of burden; he does the pulling of passengers in these rickshaws.

"Nearly all the farming is done with the water buffalo, a great big animal, black and dirty looking thing with long horns. They have a very crude looking plow, just two sticks with a long handle and a thing they hook the buffalo to and a little point about as big as my hand, on to the end of the stick.

"There is really no hired labor on farms in China. These farmers generally do all their farming with their family. They live very close together and call upon each other to help out just like they did down South in the olden days."

In responses to questions from the delegates Mr. Jernigan stated in substance as follows:

"The farmer shells his own peanuts. He did not remember having seen a bag of peanuts being taken for delivery to buyers that was not shelled."

He was asked whether or not the peanuts were shelled under sanitary conditions and replied "They don't know what the term sanitary means in China. There is nothing sanitary."

In reply to question of what kind of fertilizer was used, he said "Mostly human fertilizer. When I first arrived in China for the first six or seven months the stench was almost unbearable."

He further stated "There are thousands of acres in sections where I have been that can be very easily brought under cultivation and the people are there to farm same, if their products can be sold. These lands can be bought for about $25 per acre, Mexican money, or about $12.50 American money."

Mr. Charles W. Holman, spent several months in China as a special representative of the United States Food Administration, 1918–1919, addressed the convention of the United Peanut Association held at Montgomery Ala., September, 1920:

Speaking of Shangtung province he said "While the total acreage in farms in the province can not increase materially, the Chinese do not hesitate to change their crops where money is an incentive and they will continue to shift over to peanut production just as long as there is a market for their product."

About the farmers houses, or abode, he said: "But this house is of mud and his barn is a laugh-provoking structure.

"In early winter and for several months threshing occupies the entire attention of the household. This is done by means of a stone roller pulled around the floor. The floor itself is simply a hard, bare space of ground."

[From Commerce Reports, June, 1920.]

"So far however, it has not promised to be very profitable to supplant the native method of boiling and crushing the nuts and recooking and pressing them in cakes under a crude press operated by the leverage of a long beam."

United States Consul Sturat Lupton, Chefoo, China, in a report to the Department dated June 10, 1920, says that "It is estimated that not more than 1 per cent of the crop is consumed locally. Some are eaten in the natural state, while a small amount of oil is used for cooking and illumination."

INTERSTATE COTTON SEED CRUSHERS' ASSOCIATION,
Washington, D. C., January 18, 1921.

DEAR MR. FORDNEY: In behalf of the entire oil-milling industry included in the membership of this organization, I desire to call your attention to the fact that the gallon basis of duty on peanut and other edible oils, used in H. R. 15275, reported back to the Senate yesterday by the Senate Finance Committee, is contrary to the custom of the trade and should be changed to a pound basis to conform with trade customs and statistics.

Even when the general tariff of 1913 was enacted the various trade organizations, exchanges, etc., were rapidly adopting a uniform pound basis, and since that time the statisticians of the Commerce, Treasury, and Agricultural Departments have adopted it as far as legal requirements permitted. If the emergency tariff bill continues the old custom it will necessitate much clerical work and tend to prolong confusion which all interested in the trade have been trying hard to eliminate.

Vegetable oils are transported in bulk, tanks, cans, barrels, according to circumstances. Temperature affects bulk slightly, and there is also a slight difference in the bulk of different oils in relation to their weight. Probably for that reason varying factors are used in converting gallons into pounds, or in reversing the process, from 7.33 pounds per gallon to 7.50 per gallon. The most generally accepted factor is 7.50. It is often impractical to measure oil, but always practical to weigh it, and in ascertaining the gallon measure for purposes of tax payment, Government officials and oil-handlers generally weigh the product and use a conversion factor to ascertain the

gallon measure. It will be plainly seen that in the absence of a legal factor, which in itself would be inaccurate by reason of natural variations, there can be no accuracy in the use of the gallon basis of calculating import duties.

Buying and selling of these oils is on the pound basis, and duties should be levied on the same basis.

Using the commonly accepted factor of 7.50, if we are to have an emergency tariff on these commodities, the duty on peanut oil at 26 cents a gallon would be 0.0340, and the duty on cottonseed, cocoanut, and soya-bean oils at 20 cents a pound would be 0.0266. It would make no practical difference if you placed the duty at round figures, say, 3½ cents a pound on peanut oil and 2½ cents a pound on the other oils, or 3¼ cents a pound on peanut oil and 2¾ cents on the other oils.

In conference, or in consideration of the Senate amendments by the Ways and Means Committee, will you kindly call attention to this very important and necessary amendment, and ask its adoption.

May we suggest also that in any tariff legislation the interests of the importer-exporter should be considered, and a drawback provided to cover oils imported and reexported, either in the crude state or refined. Considerable crude oriental oil is brought into this country and refined and deodorized here, and reexported to Europe. This trade needs to be protected by the drawback provision.

Your courteous attention to our request will be appreciated.

Very truly, yours,

LOUIS N. GELDERT,
Assistant to the President,
Interstate Cotton Seed Crushers' Association.

ESSENTIAL OILS AND AROMATIC CHEMICALS.

[Paragraphs 46 and 49.]

MARTIN H. ITTNER, CHIEF CHEMIST OF COLGATE & CO., JERSEY CITY, N. J.

Mr. Chairman and gentlemen of the committee, Colgate & Co. is greatly interested in the revision of paragraphs 46 and 49 of the present tariff because it is one of the largest, if not the largest, consumer of perfume raw materials and odoriferous aromatic materials in the world. We are willing and anxious to give the committee the results of our experience in any way that may be of assistance to it. We make herein suggestions with respect to the several kinds of perfume materials.

These include, first, basic materials the production of which involves a minimum of manufacture, viz, essential oils, which are distilled from some part of plants, flower pomades and flower concretes, which are obtained by some form of solvent extraction from flowers or other parts of plants, natural odoriferous aromatic substances, obtained from animals or plants, as musk in pods, ambergris, civet from animals, and styrax and benzoin from plants.

We recommend the following wording for paragraph 46:

Oils, distilled and essential: Almond, anise, aspic or spike, bergamot, caraway, cassia, cinnamon, citronella, fennel, geranium, juniper, lavender, lemon, limes, neroli, orange, origanum, patchouli, rose or attar of roses, rosemary, sandalwood, thyme, vetivert, and ylang ylang; all the foregoing oils and all essential or distilled oils, not mixed and not compounded, not especially provided for in this section, — per cent ad valorem.

Most essential oils are not and can not be made in this country. The duty on most of them is at present 20 per cent. From our standpoint it would be desirable to have those which are not distilled in this country in commercial quantities come in free of duty.

We also recommend the following wording and grouping in lieu of paragraph 49:

Ambergris, civet, musk in pods, enfleurage greases and floral essences or floral concretes, and all natural odoriferous aromatic substances used in the manufacture of perfumes, all the foregoing not mixed and not compounded, and not specially provided for in this section, — per cent ad valorem. [This should be the same rate as for essential oils not made in this country.]

Civet, musk in pods, enfleurage greases, floral essences or floral concretes, etc., are, most of them, not produced in this country and are not capable of being produced in this country. Most of these articles are now assessed for duty at 20 per cent ad valorem. From our standpoint it would be desirable to have such of these substances as are not produced in this country in commercial quantities come in free of duty.

Perfume materials also include certain odoriferous substances and aromatic chemicals in the production of which a higher degree of skill and additional labor is involved, and upon which there should be a correspondingly higher rate of duty.

We, accordingly, recommend the following grouping in lieu of part of paragraph 49:

Floral absolutes, grained musk, benzaldehyde free from chlorine, benzyl acetate, benzyl benzoate, cumarin, geraniol, heliotropine, ionones, linalyl acetate, menthol, methyl anthranilate, phenyl acetaldehyde, phenyl ethyl alcohol, rhodinol, thymol, vanillin, and all natural and synthetic aromatic chemicals ordinarily used in perfumes; all the foregoing provided they are not mixed and not compounded, and not specially provided for in this section—per cent ad valorem. [A rate sufficient to protect American manufacturers of these articles.]

We do not mention what that should be, but believe it should be a rate which would be sufficient to protect American manufacturers of these articles.

Mr. GARNER. What do you mean by "protect American manufacturers of these articles?" That is a very indefinite term.

Mr. ITTNER. It is a very indefinite term, but I am going to make some comments which, I think, will cover this to a certain extent.

Colgate & Co., as a large consumer of these articles, respectfully requests that reasonable protection be granted to American manufacturers of these articles without regard to whether any one of them is at present being made in this country.

Before the war American perfumers purchased these substances from Germany and other European countries. The war cut off the supply of most of these articles and had it not been for the fact that some of the most important of them were supplied by American manufacturers the perfume industry would have suffered great hardship bordering on calamity.

Our recommendations are made in the belief that it is for the good of the trade at large and for our own best interests that we should not be wholly dependent upon foreign sources. The lower the duty that will accomplish the desired purpose, the better we will be pleased, but we ask that it be sufficient to protect, and that no embargo or prohibition be placed upon the importation of aromatic chemicals, as there may be considerations of quality or supply that may make it desirable to import some or all of them.

Perfume materials include, finally, mixtures and compounds made by mixing any or all of the above materials. Their composition is usually kept secret, and their true cost or value is known only to their manufacturers.

Most of these mixtures or compounds are skillfully blended and have been subjected to a high degree of manufacture. It is not infrequently the case that they approach so closely to finished perfumes that it is necessary only to add alcohol to procure a finished perfume.

Any product capable of making a finished perfume by the simple addition of alcohol may, for import purposes, be brought in in two or more parts which may be united in this country with little skill or labor. These parts may present the appearance of perfume "raw materials."

These materials are manufactured abroad on a tremendous scale. Their composition and exact value are secrets of their compounders and their identity may be covered by fanciful names that bear but slight relation to their true composition. The opportunity for undervaluation for import purposes is very great and they are all brought in in competition that is unfair to the real manufacturer of perfumes, as distinguished from the manufacturer who relies on foreign talent for a considerable portion of his compounding. In this way the protection granted by paragraph 48 to finished perfumes is almost nullified.

We recommend the following wording to afford protection against these importations not given by the present paragraphs 46 and 49:

All mixtures and compounds of essential oils or of natural or synthetic aromatic substances, or of aromatic chemicals, — per cent ad valorem.

We believe that the rate should be the same as or should very closely approximate the rate on finished perfumes.

At present these imports are allowed to enter under paragraphs 48 and 49. These paragraphs permit the imports of these substances to enter, at 20 per cent, and, as I have stated here, it is impossible to prove the composition of any of these materials, and it is therefore not possible to tell their true value. That leaves the door wide open for undervaluation for import purposes, and it gives a chance for unfair competition against the American manufacturer, inasmuch as those who imports their raw materials under their proper names, paying the proper rate of duty on the articles, on the known value, pay a higher amount of duty than any manufacturer—and I am not saying there are such, but I say the possibility is there—who may import them at an undervaluation in the form of mixtures.

Now, with respect to the aromatic chemicals, we wish for a revision of that section, and we believe that the industry which has sprung up in this country, which is furnishing us with certain compounds that we sorely needed in time of war, and which we may sorely need sometime later, and may not be able to get abroad, should be given reasonable protection. I am not able to say just what reasonable protection is. Of course, we do not want it any higher than it is necessary.

Mr. HAWLEY. Why are you unable to say?

Mr. ITTNER. I can give some figures that I have. If 5 per cent is not enough, all right, we are willing to pay more. We are willing to pay 10 per cent, or 20 per cent, or 25 per cent, or anything that is

reasonable to charge. We do not think it is reasonable to charge 100 per cent.

There are some things, for instance, that we must buy abroad, because we can not procure them in this country. On one article I have in mind, which we used to get for 5 cents a pound, and which is manufactured in this country, and of which the supply is limited, we have had to pay about $1 per pound. So, I do not care whether it is due to profiteering or if it is due to the natural conditions, I do not believe that an article which can not be manufactured here without paying 20 times as much as it was necessary to pay for that article before the war should be protected. I believe that articles which can be manufactured at rates that are no higher than most commodities have gone up should be manufactured here, and should be given what is reasonable protection, and you gentlemen after hearing the people who will testify here will be in better position than I am just at present to say what that should be. Of course, I could give a figure, but you will arrive at possibly a better figure than I could.

Mr. HAWLEY. Have you made any investigation abroad in an effort to determine the costs of production?

Mr. ITTNER. Not personally. I have been offered some of these articles recently at lower prices than we are paying in this country, and I have refused to buy them—not that we don't want to get our materials as low as possible—but I believe that the minute we stop purchasing those goods from those who manufacture them in this country, and who furnished us with those things and are furnishing them at reasonable figures, that the minute we stop buying from them they will have to shut down and we will become absolutely dependent for these things from abroad, and I believe that the manufacturers abroad will be free to raise their prices, as they have done, as soon as the foreigners get more or less of a monopoly on trade.

The CHAIRMAN. How much was the difference in that price for which you were offered those goods; how much was that below the price that you are having to pay for the domestic material; have you in mind anything?

Mr. ITTNER. One article was heliotropine, which can be bought in this country for about $4 to $4.25 per pound. We were offered heliotrophine at $3.25 per pound delivered, all charges paid.

Mr. FREAR. Who offered you that; was that offered by Germany?

Mr. ITTNER. You mean who imported it?

Mr. FREAR. Where was it imported from?

Mr. ITTNER. It was in New York, and had been imported from Germany; but some other things come from other countries also. There are four principal countries that manufacture these articles—Germany, France, Holland, and Switzerland.

Mr. FREAR. You say that the raw goods should pay the same price as the finished product?

Mr. ITTNER. No, sir.

Mr. FREAR. Why do you say—I understood you to say that the raw material should pay the same price, same import duty, as the finished product.

Mr. ITTNER. I did not intend to say that.

Mr. FREAR. I understood you to say that some oils that you were speaking of here should pay the full amount, and the same amount as the finished perfume.

Mr. ITTNER. I was speaking of the importation of those materials which are mixed or compounded, as distinguished, for instance, from the essential oils which are obtained from natural sources without mixing or blending. Things that enter as mixtures or compounds do not enter under their true names. You might take such perfume materials and blend them only slightly to get a finished perfume. They might even come in without the need of anything but the addition of alcohol to produce finished perfumes. They might contain a dozen or more different perfume materials, including synthetics, and such imports now come in under paragraphs 46 or 49 at the same rate of duty that the separate constituents pay. Now, by permitting that, a man may have his perfumes made abroad and employ French talent, or German, or Swiss talent. He can bring those mixtures in at the rate of duty that the American manufacturer has to pay on the separate constituents. The identity of these constituents is often lost when they are mixed. No man can analyze them and say exactly what their content is. You can pick out certain constituents, but you can not tell their percentages, and it is impossible to tell their exact value. I might examine them and be morally certain that their value is, say $20 a pound, but I can not go before a court and testify that I know their worth is $20 a pound and not $5 a pound. They might be undervalued and you could never prove it. The importation of these mixtures at a low rate of duty is unfair to American manufacturers and encourages undervaluation of imports.

Mr. RAINEY. I understood you to say that you wanted to revise the tariff on these importations, whether they are produced here or not.

Mr. ITTNER. Whether they are produced here or not. That was not on all of the articles covered in Schedule A. I had reference to the aromatic chemicals, such as are used in perfume manufacture.

Mr. RAINEY. What is the use of protecting something which is not produced here at all?

Mr. ITTNER. Most of our aromatic chemicals can be produced in this country.

Mr. RAINEY. Your idea, then, is to put a tariff on so as to protect a future industry?

Mr. ITTNER. The American chemists are working on this all the while, and they have been able to produce some of them here, but they have not been able to produce enough. Occasionally a new one is offered to us which we have not heretofore had.

Mr. RAINEY. Therefore, you want it to be anticipatory tariff?

Mr. ITTNER. I believe so.

Mr. RAINEY. Your theory is that the tariff ought to represent the difference in the cost of production, or the difference in the prices here and abroad, is that your theory?

Mr. ITTNER. I did not state exactly how much.

Mr. RAINEY. I know, can you state what it ought to be?

Mr. ITTNER. It ought to be enough to protect. We are going to buy some articles abroad, even though we have to pay more for them. For some special reason we may be compelled to buy some articles abroad which they do make here. But we want protection on them, nevertheless, because many will eventually be made here.

Mr. RAINEY. That rate should be the difference between the cost of production here and the cost of production abroad?

Mr. ITTNER. As near as possible.

Mr. RAINEY. Some of these articles may be produced here cheaper than they can be produced abroad?

Mr. ITTNER. But the rate ought to be enacted; I think the committee will be able to arrive at a rate that will be satisfactory.

BRIEF OF CHEMISTS AND TECHNICAL EMPLOYEES OF THE VARIOUS AMERICAN WORKS OF THE ANTOINE CHIRIS CO.

GENTLEMEN: We, the undersigned chemists and technical employees in the various American works of the Antoine Chiris Co., manufacturers of essential oils and aromatic chemicals, have the honor to further emphasize the following reasons why in our opinion the infant domestic industry with which we have cast our lot should receive a reasonable tariff protection at the present time.

First. In refutation of the rather general opinion that this industry is mainly concerned with the production of nonessential commodities, we would respectfully call attention to the fact that United States Pharmacopœial, National Formulary, and new and unofficial remedies approved by the council of pharmacy and chemistry of the American Medical Association, valued at several hundred thousand dollars, were manufactured in the year 1920, and that this sum constitutes in round numbers 70 per cent of the total business for the same period.

While it is true that these products are also extensively used in the manufacture of various toilet preparations, such as soaps, dental creams, and face lotions and ointments, their well proved antiseptic value actually places them in the class of practical necessities. Furthermore, a considerable portion of the total output enters the manufacture of disinfectants, insecticides, and food and drink flavors.

In the emergency of war and epidemic, this business was classed as an essential industry, why, because it was equipped to turn out finished products for the alleviation of human ailments and suffering, and the equipment has not been changed except to increase it to cope with like future contingencies.

Second. Shortly after the outbreak of the World War, interrupted transportation and finally complete severance of trade with the main source of supply put a stop to importations of a line of commodities which had become, through usage at least, of immense practical importance to the continuation of several lines of well-established domestic business. In the emergency thus created and at the earnest solicitation of the afore-mentioned dependent industries, the Antoine Chiris Co. decided to enter domestic manufacture. In the light of subsequent events, it developed that its main asset was the nerve to attempt the seemingly impossible, for the manufacture of essential oils and aromatic chemicals in this country was inaugurated under the most trying conditions imaginable.

1. American chemists lacked the necessary special training.
2. They had very little guidance except the patent literature, which was vague and intentionally misleading.
3. Outlined processes called for raw materials and equipment of foreign make or design.
4. Existing stocks of finished products were exhausted without thought of retaining type samples for future comparison.
5. Raw materials were difficult to obtain and in many instances had first to be prepared.
6. Exhaustive experimental work had to be undertaken.
7. Long delays incident to the granting of permits to construct or purchase the necessary installations were experienced.
8. Finally, there almost invariably followed a record of failure to produce an acceptable product, which meant, of course, experimental reinvestigation of the problem at hand, redesign and reconstruction of the equipment and a repetition of the attendant delays.

In spite, or perhaps because of the difficulties encountered, the company we represent has built and completely equipped three permanent factories, that are our pride and should be considered an asset to the country. It has employed and trained a staff of skilled factory workers whose real stock in trade at the present time is their knowledge of this particular line of business. It has enlisted the services of 20 chemists drawn from nearly as many American colleges and universities, men who have been specially trained by experience since entering their present employment.

It has established research laboratories and is actively engaged in further developing the industry to a point of greater usefulness and importance.

We are fully aware of the importance of attaining the highest standard of quality and are paying so much attention to this point that our products are being recognized at least equal and in some cases superior to prewar products of foreign make, and it is a feature which should not be sacrificed in any event.

Other things being equal, the sole strength of foreign competition is due to its scientific organization and long trained personnel.

The interlacing utilization of by-products between the various branches of the chemical industry will make for supremacy even at normal rates of exchange, of which so much has been said and written, and it is for these reasons that the infant industry must be considered as a whole in order to be made effective.

The coal-tar by-product industry and all its dependent branches, whether dye, munition, pharmaceutical, or aromatic chemicals for other legitimate purposes are key industries on the same chain, and a "Chain is just as strong as its weakest link." Any reasonable protection for a domestic dyestuff industry, for example, will not avail unless there exists an outlet for its by-products.

The manufacturer of aromatic chemicals for the soap, flavoring extract, drug, and other related trades is a consumer of such by-products. Furthermore, the same coal-tar primaries and intermediates are used in all the lines of manufacture enumerated and anything which favors quantity production, which is the keynote of American manufacturing supremacy in other fields, warrants earnest consideration at this time.

All of this has, no doubt, cost money, and lots of it, and the industry is now laboring under the handicap of a burdensome overhead. It has yet to write off the cost of the mistakes that were made. It is strugling to consolidate its immature efforts to establish a domestic industry on a sure and firm foundation.

We are continuing to manufacture, fully believing that sanity will prevail, and that those who hold the future welfare on this new American industry, will cope with the situation by suitable legislation, for without this temporary assistance all efforts thus far expended will have been in vain, and there will be a reversion to the point of start, which was absolute dependence upon foreign countries, now friends but our enemies of yesterday and perhaps of to-morrow, for the very commodities which make for national strength in both peace and war.

Third. Finally, not as chemical employees of any particular industry, but as exponents of the cause of education in general and scientific training in particular do we make our strongest appeal.

We have been affiliated with business long enough to have been relieved of at least some of the theories which we considered our main stock in trade and to see and feel the dependence of industry on scientific control in the strictest sense of the term.

It has been boldly claimed that the war resulted in some good, in that it fostered a rapid growth of domestic manufacture through temporary removal of foreign competition. This in itself is a rather empty honor. The real benefit lies in the effect upon our present and future national thought and action of which the war and its resulting industrial activity was the unconscious cause. We would like to maintain the advantage thus inadvertently thrust upon us, not by destruction of competition by unfair means, but through indisputed power of native ability and exercise of talent rightly directed.

Our venture into the unknown field of applied chemistry has been successful. The premise, that what has been done can be done, was correct. The result, namely, the demonstrated ability to succeed in a new field of achievement is satisfactory in both yield and quality, but as is oftentimes the case the by-products contain the germ of greatest ultimate success. The experiment has only passed the laboratory stage; it now needs developing to bring out all its latent possibilities and make it a permanent success.

Consider one of the many undeveloped by-products of this interesting experiment, namely, the awakening of the American youth to the practical value of higher education. Nothing has so popularized the desire for education as our recent activity along all lines of chemical manufacture.

Young men who have had no ambition other than to remain common laborers, have had their eyes opened to the great possibilities of further schooling. Scores of young men who heretofore considered a common school education sufficient for their future needs are now enrolled in the night schools of the country, pursuing courses of study in preparation for more responsible positions or for college entrance, meantime maintaining their day employment to help defray expenses. What is more commendable on their part or more pregnant with possibilities for more efficient action in the material sense, and for more wholesome living in the higher sense.

Consider, also, the impetus which has resulted in filling our colleges and universities, particularly the scientific courses of instruction to overflowing with serious minded men and women who are there for the definite purpose of fitting themselves

for greater fields of usefulness. Heretofore there has been far too much going to college because it was considered the proper thing to do, but in an otherwise purposeless manner. Times have changed. We are now living in an industrial age, and the spirit of industry has penetrated our halls of learning.

Consider the effect, of these young men and women leaving the classroom and laboratory, two, four or six years hence only to find that their opportunities for application have been very much reduced or no longer existent. We speak from experience when we say that great sacrifices have been and are being made by parents that this additional education may be obtained. Such building for the future means a long period of outgo with no immediate returns and it is difficult to conceive of a more disastrous effect on our national pride and inclination to "follow through" than to permit this science founded industry to decline for the sake of a little encouragement at the time of its greatest need.

Then again, our institutions of learning have been awakened to the importance of emphasizing the practical phases of science. Courses in applied chemistry have been installed and instruction offered by men who have been connected with war activities here or abroad. They have taken advanced work on the industrial firing line, so to speak, and have returned to their pedagogic duties better equipped than ever to make their courses of instruction of real practical value.

In the past it has been found impossible to find recent graduates with any specialized training in science. All had to serve an apprenticeship in the line of work selected, where for a period varying with the individual they were an expense regardless of entrance remuneration. This condition has retarded our industrial progress more than any other one thing, and the prospects of its alleviation can not be too strongly emphasized. Some of us can remember when the classrooms and laboratories of our leading universities had a decidedly foreign atmosphere. The professors and instructors were German trained; the lessons were drawn from German texts; and all the chemical and physical apparatus, analytical reagents, and organic chemicals were of German make. We were taught, unconsciously, it is true, that all pertaining to science that was worth while came from Germany, and that Germany was the only place to finish a scientic education. But happily those days are past. Thanks to the jolt we have received we can now, at least, manufacture scientific training at home. And it is to our higher institutions of learning, now thoroughly alive to the situation, that industry must look for the determination of fundamental facts, the development of theories, and the establishment of general principles.

We believe that American manufacturers have come into full realization of the value of thorough scientific control of their operations and that by placing them on a strictly scientific basis they can eventually occupy an independent position with respect to foreign competition.

A good indication of the growing spirit of cooperation between the forces who employ chemists and those who train them is the increased appropriation of funds to create scholarships and fellowships at leading colleges and universities for the purpose of encouraging advanced students to continue the study of science. To our mind this is the most important single step toward advancing the cause of scientif c education and its application to industry in America to-day, and should be encouraged by every possible means. It will result, if continued and generally adopted, in bringing the best scientific thought to bear on industrial problems, the attracting of the really big scientific men of the country to whom no other inducement to concern themselves would appeal. It enlists the attention of selected advanced students, who have shown proficiency in science or a special aptitude for research work. It enables them to enroll for an advanced degree in science at a critical period of their college course when private funds are usually exhausted and they have no alternative but to seek employment only partially prepared, and it makes provision for the future of the very class of help which industry is seeking and must have, in the peace-time commercial fight, which is sure to be waged.

Any encouragement at this time will tend to further amalgamate science and industry in this country, so sadly lacking in the past, and any discouragement will result in a discontinuation of the most certain means of entrenching our industrial position. Chemical research at best is slow and time consuming, and industry is notoriously impatient of results, but it should be remembered that 1921 is the fiftieth anniversary of the founding of Germany's political and economic structure, and we are unwilling to concede that her scientific ability per capita is any higher than ours.

Therefore, in the interest of the advancement of scientific control of American industry, we see the strongest reason why some temporary means should be developed whereby the impetus already given should not be allowed to lose its momentum.

G. F. Richmond, director of research, University of Michigan, 1900; Hilon M. Sawyer, Columbia University, 1879; W. J. Seely, University of Michigan, 1912; John H. Montgomery, Cornell University, 1912; C. A. Swan, Pratt Institute, 1906; M. Szamatolski, University of Berlin, 1892; C. T. Ho, University of Michigan, 1917; Frank Talbot, New York University, 1917; G. F. Robins, Rutgers, 1914; C. T. Thompson, Rutgers, 1908; Ivan H. Budd, Cornell University, 1917; Ray A. Morris, Oregon State College, 1920; John C. Edwards, Cornell University, 1920; Earle H. Morse, University of Maine, 1916; Arthur W. Mudge, jr., Massachusetts Institute of Technology, 1914; C. Gordon Smith, Rutgers, 1909; G. W. Geiger, Harvard University, 1908; Frank Woodworth, Yale, 1904; R. B. Hank, Pratt Institute, 1912; E. Fritscher, University of Jena, 1893.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

LEMON, ORANGE, AND BERGAMOT OIL.

Lemon, orange, and bergamot essential oils are by-products of the citrus fruit industry and are used in flavoring extracts, perfumes, and medicinal preparations. They are therefore raw materials necessary to important American industries. Both the oils of lemon and bergamot, as there was no production in this country, which is true for bergamot and almost as true of lemon oil even at the present time, were on the free list till the last tariff revision, when a duty of 10 per cent was assessed on lemon oil and of 20 per cent on bergamot oil for revenue purposes. A duty of 25 per cent, which had been levied on orange oil prior to the last tariff revision and had reduced annual importations of nearly 20,000 pounds, thus defeating the purpose of revenue, for none was then as even now very little is produced in this country, was reduced to the more reasonable rate of 10 per cent, so as to make it, instead of a prohibitive, a revenue yielding rate.

The supply of these oils is derived almost entirely from Italy, from which, owing to increased consumption, a yearly average of 515,222 pounds of lemon oil has been imported under the present rate in the last seven fiscal years, against a yearly average of 412,540 pounds in the period of fiscal years 1909–1913; 282,349 pounds (including small supplies from the West Indies) of orange oil were received in the fiscal year 1920 under the 10 per cent rate, against only 79,797 pounds in fiscal year 1913 under the 25 per cent duty; and 92,706 pounds of bergamot oil were supplied in fiscal year 1920 compared to 64,259 pounds in fiscal year 1913.

Although California, which is a citrus fruit growing State, has lately entered the field of lemon and orange oil production, the domestic output is still limited and is far from sufficient to supply the increasing demand of American manufacturers for these oils. The entire production of lemon oil in California was estimated in 1919 at only about 80,000 pounds, or scarcely 10 per cent of our requirements. No figures are available for orange oil, the output of which is presumably far less, as the byproducts industry, so far as it concerns the extraction of essential oil, is more identified with lemon than orange culls, it being in the former case associated with the production of citrate of lime.

In 1919 about 13,000 tons of lemon culls were crushed in California, but even allowing for double the present amount, when the area of not yet bearing lemon trees shall have come into production which will require many years, California could never supply more than 20 per cent of the lemon oil requirements of the United States, for, to quote from United States Tariff Commission Report No. 13, "in California the cultural methods in lemon groves are superior to those generally used in Sicily and the proportion of culls is therefore much less than in Sicily. Although the proportion of culls is variable, it may be roughly estimated at 10 per cent in California, against 30 to 50 per cent in Sicily." And we learn further from the same source that "the Sicilian method of separating the peel and pressing out the oil by hand is not used in California because of the higher American wages. In California the whole fruit pulp is put through a machine which thoroughly shreds it, and the pulp then passes to a filter press, which yields an emulsion of juice and oil. This emulsion then passes through a centrifugal separator which separates the oil from the juice. As the separa-

tion of oil and juice by this method is not perfect, the oil-fraction must be distilled to secure the lemon oil. The oil obtained in this way is not chemically identical with the hand-pressed oil and brings a lower price, since it is inferior in flavor."

This we have stated to show that the imported oil both of lemon and orange, by reason of its extraction by hand which is essential to secure the standard of quality required by law for its admission into this country, will always represent a higher cost of production than the California product, extracted by machinery or distillation, and the present supply of which could not cover more than 10 per cent of the requirements of this country.

As the increased consumption of soft drinks, through the enactment of prohibition, will call in future for a greater demand of both lemon and orange oil conditions are per se apt to insure a profitable market to the output of domestic citrus fruit essential oils without imposing upon the manufacturers in need of these raw materials the hardship of rates higher than the present which are ample both for the purpose of protection and revenue.

This chamber believes that sufficient argument has been made to show the advisability, to which it respectfully calls the attention of this honorable committee, of maintaining unchanged the present rates of 10 per cent on both oils of lemon and orange and of 20 per cent on the oil of bergamot.

Brief of American Aromatic Chemical Association.

Our association represents a branch of the organic chemical industry, which, like other branches of the synthetic aromatic chemical industry, remained quite undeveloped in the United States up to 1915. During the war a great many plants, due to necessity, have been started in this country. Our industry is based on the synthesis of aromatic organic chemical bodies from natural or coal-tar bases and constitutes, according to acknowledged authorities, the highest development in organic chemistry. Its development depends on the employment of highly trained research and plant chemists and specialized and skilled labor. For the purpose of tariff consideration, the products of our manufacture could be subdivided in accordance with the sources of their origin into three classes:

(*a*) Synthetic odoriferous aromatic chemical bodies obtained directly or indirectly from coal tar.

(*b*) Synthetic organic aromatic odoriferous chemical bodies obtained directly or indirectly from volatile oils or other natural or chemical bodies.

(*c*) Volatile (essential) oils obtained by distillation of vegetable bodies, such as the whole aromatic plants and plant parts, as leaves, stems, flowers, roots, wood, barks, resins, oleoresins, balsamic resins, gum resins, fruits, seeds, etc.

In amplifying class (*a*), which embraces odoriferous chemical bodies directly or indirectly obtained from coal-tar bases, we wish to state in explanation that these bases employed are the same as those used by other allied coal-tar chemical industries, such as dyestuff making, drug manufacturers, photographic materials, synthetic tanning materials, insulating materials, artificial leather, artificial rubber, synthetic resins, and all similar industries. It will be seen that our industry is an integral part of the entire coal-tar industry, playing its rôle of contributing important products and which a self-contained American coal-tar and organic chemical industry would be incomplete.

In view of the above explanation we would respectfully suggest that the tariff classification embracing this class of products could be worded as follows:

> Paragraph —. Benzyl benzoate, benzyl acetate, methyl salicylate, diphenyl oxide, coumarin, phenyl acetic aldehyde, and all other odoriferous aromatic chemical bodies or derivatives thereof when obtained, derived, or manufactured, in whole or in part, from any of the products provided for in groups I and II, Title V, "dyestuffs," act of September 8, 1916; all the foregoing, provided they are not mixed nor compounded.

Bill H. R. 8078, which has passed the House of Representatives, embraces only a portion of the products manufactured by our industry. It should include our branch in its entirety to be representative of a self-contained coal-tar chemical industry, which no doubt was the original intention of the framers of that bill.

For tariff purposes class (*b*) could be worded as follows:

> Paragraph —. Heliotropin, geraniol, and its esters and other derivatives, rhodinol and its esters and other derivatives, santalol, octyl, nonyl, and other

aldehydes, terpineol, eugenol, methyl eugenol, vanillin, ionone, anisic acid and all other odoriferous organic chemical bodies, by whatever name known, obtained directly or indirectly from volatile oils or from other natural or chemical sources; all the foregoing, provided they are not mixed nor compounded, 45 per cent ad valorem.

As in the production of other high-priced organic chemicals, the item of labor cost enters prominently in our industry, these products are produced only in small quantities, so the quality of the labor employed must be of the highest, therefore more costly. Together with this it should be understood that to make 1 pound of our finished products of this class it usually requires 2 to 3 pounds and frequently upward to 10 pounds of raw materials.

For tariff purposes class (c) could be worded as follows:

Volatile (essential) oils distilled in the United States from ambrette seeds, amyris, angelica, bay leaves, birch, calamus, cardamon, cedar leaf, cedarwood, celery seed, cloves, copaiba, cubeb berries, erigeron, ginger, guaiac wood, hemlock, juniper berries, mustard, nutmegs, olibanum, orris, parsley, patchouly leaves, pennyroyal, pepper, peppermint, peru balsam, pimento berries, pine, sandalwood, sassafras, snake root, spearmint, spruce, styrax, tansy, tolu balsam, vetivert Indian, wintergreen, wormseed, wormwood; all the foregoing, provided they are not mixed nor compounded, 30 per cent ad valorem.

To simplify tariff classification of the act of 1913 we would respectfully suggest that paragraphs 46 and 49 of that act be combined into one, as these products are not manufactured in the United States, and are used chiefly as basic raw materials for the manufacture of soaps, perfumes, cosmetics, drugs, and in many instances act as raw materials for our own industry, and we suggest that it be worded as follows:

Enfleurage greases and floral essences or floral oils or floral concretes and all natural odoriferous products manufactured from flowers by whatever method, provided they are not mixed nor compounded, nor fortified. Oils distilled and essential, orange and lemon, amber, anise, bergamot, caraway, cassia, geranium, lavender, citronella, demongrass, neroli or orange flower, attar of roses, rosemary, thyme, ylang ylang, all the foregoing and all other distilled, essential (volatile) oils not specially provided for in paragraph —, provided they are not mixed nor compounded, — per cent ad valorem; all animal products such as ambergris, civette, castoreum, musk (in pods), all the foregoing, provided they are not mixed nor compounded, — per cent ad valorem.

Our industry is naturally interested in proper protection for the industries consuming our products. We are particularly interested in an equitable protection of the raw materials enumerated and referred to above. We are, however, mindful of the possibilities of meeting with unfair competition should any of these products enter our ports mixed or compounded, for a fair and accurate valuation can not be ascertained on such mixtures, and unless such are classified as perfumes not containing alcohol, their entrance under the classification as raw materials will work as a hardship to our industry, and in our opinion will work an equally or greater hardship on industries consuming our materials.

All mixtures compounded from synthetic odoriferous aromatic chemical bodies obtained directly or indirectly from coal tar as embraced by class (a) of this act; all mixtures of synthetic organic aromatic odoriferous chemical bodies obtained directly or indirectly from volatile oils or other natural or chemical bodies embraced by class (b) of this act; all mixtures of volatile (essential) oils obtained by distillation of vegetable bodies such as the whole plants or of plant parts as embraced by class (c) of this act; all mixtures of enfleurage greases and floral concretes and natural odoriferous products manufactured from flowers by whatever method, or mixtures of these with synthetic odoriferous aromatic bodies obtained directly or indirectly from coal tar or mixtures of the floral products with synthetic organic chemical bodies obtained from natural products or mixtures of the floral products with volatile (essential) oils, and any two or more bodies belonging to any one class when mixed together or when mixed with one or more of the bodies belonging to either the classes (a), (b), (c), or (d) of this act, shall be considered as compounded mixtures and classified as finished perfumes, whether or not they contain alcohol, and accorded the same rate of duty of — per cent ad valorem.

We respectfully call your attention to the statement of Dr. Martin H. Ittner, chief chemist of Colgate & Co., manufacturing perfumers, made before your honorable committee on January 8. In speaking of these compounds, Dr. Ittner said, regarding these mixtures:

"Not the raw material. I was speaking of the importation of these materials—I will tell you why, because in these lists I did not mean to say raw materials. For instance, the essential oils are substances which are extracted from natural sources, the same as tallow is a substance which is extracted from an animal. There are a great many of those things which are extracts, and which are contained in that list, not by name, but as compounds, but when you take perfume material and then blend them, you might have to add one or two things, or you might have to add a dozen, or it may contain a large number of synthetics, which, in the case of the imports will be placed according to paragraph 46 or 49, and they may be imported under the same rate of duty that the separate constituents have to pay. Now, by permitting that, a man may have his perfumes made abroad and employ French talent, or German, or Swiss talent. He can bring those in at the rate of duty that the American manufacturer has to pay on the separate constituents. The identity of these articles is lost when they are mixed.

"No man can analyze them and say exactly what the content is. You can pick out certain constituents, but you can not tell what percentages, and it is impossible to tell their exact value.

"I might examine them and be morally certain that their value is $20 a pound but I can not go before a court and testify that I know that they are worth $20 a pound and not $5 a pound. They might be undervalued."

In the Tariff Information Survey prepared by the United States Tariff Commission, reference is made to paragraph 49 on pages 81 and 82; mixtures and preparations are discussed and referred to as "compounded semifinished oils. On page 82 the statement of the Tariff Commission is as follows:

"Many of these preparations may represent a compounding of a large number of constituents and by a simple addition of alcohol may become marketable as finished perfumes. By importing these semimanufactured preparations and completing the compounding in this country, there is thus a possible means of evading the higher duties imposed on finished perfumes and toilet waters."

We would suggest that your honorable committee give these statements your serious consideration, as it affects to a very great extent the future prosperity of our industry together with the industries actually consuming our products; and furthermore, unless these products pay the same rate of duty as finished perfumes without alcohol, there are grave possibilities of entering semifinished perfumes in this country classifying them as raw materials, in which case the Government would collect only a part of the revenue which it is justly entitled to.

Following we wish to submit a few facts relative to our industry, which facts might tend to show conclusive reasons for its proper protection.

The American organic chemical industry has been developed by American chemists, and American business men with the aid of American capital employing American labor.

While it is true that some of our products are used in the manufacture of the various toilet preparations, soaps, perfumes, flavoring extracts, nonalcoholic beverages, the industry is equally concerned with the production of the organic chemicals listed in the United States Pharmacopoeia, National Formulary, and others are new and nonofficial remedies approved by the council of pharmacy and chemistry of the American Medical Association, and during the war the existence of this infant American industry (one of the "key industries of the Nation") proved of inestimable value to the country, contributing its quota to the "national defense."

As an illustration of the importance and interdependence of many products of our industry, we submit the general uses of benzyl benzoate. This synthetic, aromatic chemical body previous to the war was used solely as a solvent in perfumery; but in 1917 Dr. Mach of the Johns Hopkins University found a new use for it, and to-day it is considered one of the best nonnarcotic, antispasmodic (replacing opium). During the war benzyl benzoate was adopted by the air craft production board, as the best high boiling solvent for the waterproofing and fireproofing of airplane wings.

There are a number of such aromatic chemicals which uses are varied as above, but this illustration is sufficient to show the relationship existing between this industry and every branch of the aromatic chemical industry.

Proper regulations controlling the dumping of cheap foreign products on the American market is now necessary. Such dumping has already been started and is encouraged by the low rate of exchange. If foreign competition is allowed to discourage American production of these commodities, it will only be a matter of time when it will be necessary for this industry to close its doors (for the depreciation of the apparatuses used in the manufacture of these products is indeed very rapid), and after this has been accomplished they can raise their prices to offset the loss which has

occurred during the period when they were dumping their products on the American market, and such would no doubt be a repetition of their former known methods.

Our only hope in preventing the dumping of Europe's surplus products in this country for the purpose of stifling competition is in the Fordney bill, H. R. 10918, and also the Smoot bill just introduced. This will no doubt give us some temporary relief.

Finally, we call your attention to the fact that the consumers of our products favor the granting of protection for our industry. Let us quote from the Tariff Information 1921, committee print of the hearings, part 3, page 188, from the statement of the Colgate & Co. representative:

"Colgate & Co., as a large consumer of these articles, respectfully requests that reasonable protection be granted to American manufacturers of these articles without regard to whether any one of them is at present being made in this country. Before the war American perfumers purchased these substances from Germany and other European countries. The war cut off the supply of most of these articles and had it not been for the fact that some of the most important of them were supplied by American manufacturers the perfume industry would have suffered great hardship, bordering on calamity."

From the same committee print, No. 3, page 194, we wish to quote from Mr. Spiehler's testimony:

"Restrictions with which our industry in this country was constantly threatened, including classification as a nonessential with consequent deprivation of all the facilities necessary to continuous operation. Within a recent period, the flower growers of France have been permitted to organize themselves into an association, the effect of which has been to provide the French industry manufacturing finished perfumes with an adequate supply of raw materials at moderate prices while buyers of such materials for American manufacture have been obliged to content themselves with what was left and with prices substantially higher than those paid by our French competitors."

With respect to exchange and its differences, we believe that duties should not be based on the European selling price, but on the market price in this country, and if interim legislation could be secured, then differential duty would be acceptable.

This industry submits this brief to your honorable body for its urgent and serious consideration, and with the belief in your intention of giving it adequate protection, thereby permitting it to live and continue to serve the interdependent needs of the Nation.

OIL OF MUSTARD (ARTIFICIAL).

[Paragraph 46.]

A. F. LAYMAN, CENTRAL SPECIALTY CO., KANSAS CITY, MO.

Mr. LAYMAN. I will address myself to the subject of a tariff on artificial oil of mustard or allylisothiocyanate and other allyl compounds.

It is practically included in paragraph 46. It is probable that the above synthetic organic chemicals at present are included in sections 46 or 16 of Schedule A; however, no direct mention of any compounds containing allyl is found in the schedule. We would recommend that a clause be inserted in the schedule reading as follows:

That a duty of $3 per pound be placed on artificial oil of mustard chemically known as allylisothiocyanate and on all other compounds of allyl.

Mr. GREEN. Is this a new product?

Mr. LAYMAN. You mean it has never been manufactured before in the United States?

Mr. GREEN. I thought so, because I never heard of it before.

Mr. LAYMAN. It is a very new thing.

Mr. LONGWORTH. What is it selling at?

Mr. LAYMAN. The market price at present is about $4.50 a pound.

Mr. LONGWORTH. You want a duty of 80 per cent?

Mr. LAYMAN. If you will please let me read my brief, then I will be glad to answer any questions, because I think I have outlined there the information you desire.

(The brief read to the committee by Mr. Layman is as follows:)

ARTIFICIAL OIL OF MUSTARD, OR ALLYLISOTHIOCYANATE, AND OTHER ALLYL COMPOUNDS.

It is probable that the above synthetic organic chemicals at present are included in section 46 or 16 of Schedule A; however, no direct mention of any compounds containing allyl is found in the schedule. We would recommend that a clause be inserted in the schedule reading as follows:

"That a duty of $3 per pound be placed on artificial oil of mustard, chemically known as allylisothiocyanate, and on all other compounds of allyl."

This duty is necessary in order that the industry growing out of its manufacture may be preserved.

Before the outbreak of the World War no artificial oil of mustard had ever been manufactured in this country and we were entirely dependent on Germany for our supply. We began the manufacture of this article because at that time we were consumers and needed it for use in a pharmaceutical preparation which we manufactured. We have so increased our output that we have been able to fill all orders for the past two years and now have a reserve supply of more than 3,500 pounds, a quantity sufficient to supply the entire consumption of the United States for 60 days. So far we have met all foreign competition, but are now selling this article at cost, and unless protection is granted we will be compelled to close our plant.

This industry, while small, is important. We believe that no true American ever wishes to see the day when the United States is again dependent upon Germany for synthetic drugs and chemicals. We believe that a chemical industry needs protection if it is producing a synthetic drug hitherto manufactured abroad, no matter whether the capital invested amounts to thousands or millions of dollars.

While artificial oil of mustard is not a chemical for use in warfare, it could be, and was used by the Germans in the earlier part of the war for driving their opponents out of the trenches, but was later replaced by the more horrible mustard gas, dichlordiethyl sulphide.

We began the manufacture of artificial oil of mustard in 1915 in a small way, with a daily output of about 5 pounds, which we used entirely in our pharmaceutical department. We have gradually increased our output until now we have a capacity of 150 pounds per day and can increase this 50 per cent on short notice should occasion ever require. We may here add that we have had 4 years experience in the manufacture of this article, while the Germans have had 40. We feel sure that within five more years we could beat them at their own game. At present we fear that unless a specific duty sufficient to meet the difference in cost of production here and abroad is levied, that the industry will be wiped out by the old system of dumping.

We employ 10 men in the manufacture of this product, 2 of whom are expert chemists.

We have no way of comparing our production costs and wages with those of foreign countries. We are satisfied that the wages paid here are much higher and that production costs are higher.

We use chemicals made by American manufacturers and believe they cost much more than our German competitors have to pay. We might add that the basic chemicals we use are glycerol, chlorine, bromine, sulphur, cyanides, and phosphorus.

In regard to unfair competition and dumping we may say that we have felt this already. Although our product is presumably under protection of the War Trade Board, importations have been made freely from Holland under licenses, and the firm making quotations and importations has quoted whatever price they deemed necessary to get the business, quoting, for instance, one price in New York and a cheaper one to a firm in a small inland city in Illinois. We have thus far met their competition and secured the business, except where the buying firm preferred inferior foreign goods at a higher price. When we began the manufacture of artificial oil of mustard we sold the product at $26 per pound, and the price on the market to-day is $4 to $4.25. As we have perfected equipment or made new discoveries that lessened the cost of production, we have given the consumer the benefit of the reduction. There is consumed annually in the United States less than 20,000 pounds of this synthetic drug. Statistics show that during the year ending June, 1914, about 15,000 pounds were imported and as none was made in the United States prior to that time it is to be presumed that this represented the annual consumption at that time. It has probably increased since then.

The present source of importation of this article is Ameersfoort, Holland, at least that is given as the source. It is noteworthy that during the World War no artificial oil of mustard was shipped to this country from Holland, although shipments of the natural oil came through frequently. As soon as the German-Holland frontier was opened offers were made.

According to reports from the War Trade Board 2,739 pounds have been imported under license. Quite a quantity was imported before the War Trade Board and Revenue Department functioned coordinately. The product imported bears evidence of age and deterioration, and has been offered at various prices ranging from $8 to $3.05, the lower quotations being offered our contract consumers. As there is no clause in the present law which names artificial oil of mustard (allylisothiocyanate) or other compound of allyl, we suggest that it be placed under a new classification of synthetic organic chemicals not derived from coal tar and that a duty of $3 per pound be placed on allylisothiocyanate (artificial oil of mustard) and all other compounds of allyl. The necessity for mentioning all other allyl compounds is that it would be possible to import intermediates such as allyl chloride, or allyl bromide, then finish the product here. We may remark that these intermediates have never formed articles of commerce. Artificial oil of mustard now is included, we presume, in paragraph 46 under the expression "all other essential oils" and the present duty is 20 per cent ad valorem.

We again urge the necessity of a specific duty, as no matter what the ad valorem protection can easily be defeated, as the consumption is small, and if past practices are any criterion the article could be practically given away until American manufacturers were forced to retire from business.

We have no suggestion to make regarding administrative features of present law, except that for a while there was some lack of coordination between the War Trade Board and customs officials, due to a misinterpretation of the War Trade Board's orders. This, we believe, has been straightened out.

We, however, feel that the artificial oil of mustard being imported from Holland is really of German origin. This feeling is based entirely on statements made to us by buyers of essential oils who have returned from trips abroad.

A. F. LAYMAN,
Manager, Central Specialty Co., Kansas City, Mo.

Mr. TREADWAY. What is it used for?

Mr. LAYMAN. It is used in liniments as a counter-irritant. It is used in ointments, one very well advertised ointment called Musterole. It is used in proportion of about 2 per cent in ointment and about 1½ per cent in liniment. Very small portions are used.

Mr. TILSON. Where do you get your raw material?

Mr. LAYMAN. We buy our raw material from American manufacturers. We buy bromine from the Dow Chemical Co., and buy other chemicals from other companies.

Mr. TILSON. Is any part of it made of mustard?

Mr. LAYMAN. No, sir. Chemically it is exactly the same as the natural oil of mustard. It would take a very expert chemist to tell the difference between the two. It bears the same relation to natural oil of mustard that the artificial oil of wintergreen, methyl salicylate, does to true wintergreen. You can hardly tell the difference between the two.

Mr. TILSON. Like the German mustard gas, there is no mustard about it.

Mr. LAYMAN. No.

Mr. COLLIER. What about the price of this artificial oil of mustard, in 1914 when 15,000 pounds were imported?

Mr. LAYMAN. In 1914 I think the average price it was imported at was about $1.50 to $1.75. You must remember that at that time glycerol in Germany was selling at 6 cents a pound. Bromine and all other chemicals were down.

Mr. COLLIER. You say you get $26 sometimes during the——

Mr. LAYMAN. The first we made we sold for $26, but our process was very expensive at that time, and we have made wonderful improvement along the line of making it since then.

Mr. GREEN. Is there a possibility of further improvement you think?

Mr. LAYMAN. I think there is. We are installing some apparatus now and hope to use some things that we have worked out in the research laboratory, but I could not say. It is this way: We want the difference in the cost of production and the German cost of production. As the brief states, there is only a small quantity consumed in the United States, but we have gone to work, built up a factory here, and for sentimental reasons, if for no other, we do not like to be driven out of the business.

Mr. GARNER. You are really an infant industry?

Mr. LAYMAN. Yes, very infant; a very small infant; a very modest industry, too.

The CHAIRMAN. Are you the only industry that produces this article in the United States?

Mr. LAYMAN. Well, the Musterole Co., at Cleveland, Ohio; Mr. Miller of that company informs me he is now making some, but that he did not know whether he would continue or not. You will hear him from the standpoint of the consumer. They are the largest consumers in the United States.

Mr. DICKINSON. What is it being sold now for a pound?

Mr. LAYMAN. It is being sold at $4.25 a pound. That is the market quotation in New York. When I said that we were selling this at cost I meant we had sold some at $3 a pound, because this firm in Holland sent a cablegram to a firm we have a contract with. Our contract contains a guaranty against the seller's decline in price. Of course, that is our decline. But this firm in Holland quoted $3.05 a pound. It cabled to them. They immediately wired me, and I said, "We will make it $3." That is the only thing I could do, because we had to meet this foreign competition, as this firm consumed a very large quantity of the artificial oil of mustard.

Mr. WATSON. Is oil manufactured from the plant?

Mr. LAYMAN. The oil is manufactured from the plant, as I understand it, in Holland, but it is selling at $30 a pound, the natural oil. As far as it is used, the artificial is just as good as the natural. I might add that this artificial oil of mustard is a U. S. P. product. It is mentioned in the United States Pharmacopœia, and we have to conform to certain chemical standards, and we make an absolutely U. S. P. product. We sell to the large essential-oil houses in New York, and to the large consumers we sell direct.

Mr. GARNER. Mr. Layman, your cost of producing this oil at this time is how much?

Mr. LAYMAN. Our cost of producing this oil I estimate, under the present conditions, at $3.

Mr. GARNER. Aren't you asking just a little too high. You ask for the entire cost of that production as a protection. Is not that a little high?

Mr. LAYMAN. It might be and it might not be. I don't know. We are content if we could make 50 cents a pound, and then it would not amount to more than $20,000 a year for us. I put this in as a specific duty because I feared anything in ad valorem we would have

the dumping feature presented. I do not know, but it might be that we could stand less six months from now, I know we could. Last year Representative Bland introduced a bill, and in that we asked $5 a pound. Well, I thought that was the minimum amount that we could ask at that time. Now it is $3. Six months from now it might be $2, but we do want protection until we get our plant established.

BRIEF OF CENTRAL SPECIALTY CO., KANSAS CITY, MO.

ARTIFICIAL OIL OF MUSTARD AND OTHER ALLYL COMPOUNDS.

It is probable that the above synthetic organic chemicals at present are included in paragraph 46 or 16 of Schedule A; however, no direct mention of any compounds containing allyl is found in the schedule. We would recommend that a clause be inserted in the schedule reading as follows: That a duty of $3 per pound be placed on artificial oil of mustard, chemically known as allylisothiocyanate, and on all other compounds of allyl.

This duty is necessary in order that the industry growing out of its manufacture may be preserved.

Before the outbreak of the World War no artificial oil of mustard had ever been manufactured in this country and we were entirely dependent on Germany for our supply. We began the manufacture of this article because at that time we were consumers and needed it for use in a pharmaceutical preparation which we manufactured. We have so increased our output that we have been able to fill all orders for the past two years and now have a reserve supply of more than 3,500 pounds, a quantity sufficient to supply the entire consumption of the United States for 60 days. So far we have met all foreign competition, but are now selling this article at cost, and unless protection is granted we will be compelled to close our plant.

This industry, while small, is important. We believe that no true American ever wishes to see the day when the United States is again dependent upon Germany for synthetic drugs and chemicals. We believe that a chemical industry needs protection if it is producing a synthetic drug hitherto manufactured abroad, no matter whether the capital invested amounts to thousands or millions of dollars.

While artificial oil of mustard is not a chemical for use in warfare, it could be and was used by the Germans in the earlier part of the war for driving their opponents out of the trenches, but was later replaced by the more horrible mustard gas, dichlordiethyl sulphide.

We began the manufacture of artificial oil of mustard in 1915 in a small way, with a daily output of about 5 pounds, which we used entirely in our pharmaceutical department. We have gradually increased our output until now we have a capacity of 150 pounds per day and can increase this 50 per cent on short notice should occasion ever require. We may here add that we have had four years' experience in the manufacture of this article, while the Germans have had 40. We feel sure that within five more years we could beat them at their own game. At present we fear that unless a specific duty sufficient to meet the difference in cost of production here and abroad is levied that the industry will be wiped out by the old system of dumping.

We employ 10 men in the manufacture of this product, two of whom are expert chemists.

We have no way of comparing our production costs and wages with those of foreign countries. We are satisfied that the wages paid here are much higher and that production costs are higher.

We use chemicals made by American manufacturers and believe they cost much more than our German competitors have to pay. We might add that the basis chemicals we use are: Glycerol, chlorine, bromine, sulphur, cyanides, and phosphorus.

In regard to unfair competition and dumping we may say that we have felt this already. Although our product is presumably under protection of the War Trade Board, importations have been made freely from Holland under licenses, and the firm making quotations and importations has quoted whatever price they deemed necessary to get the business, quoting, for instance, one price in New York and a cheaper one to a firm in a small inland city in Illinois. We have thus far met their competition and secured the business, except where the buying firm preferred inferior foreign goods at a higher price. When we began the manufacture of artificial oil of mustard we sold the product at $26 per pound, and the price on the market to-day

is $4 to $4.25. As we have perfected equipment or made new discoveries that lessened the cost of production, we have given the consumer the benefit of the reduction. There is consumed annually in the United States less than 20,000 pounds of this synthetic drug. Statistics show that during the year ending June, 1914, about 15,000 pounds were imported, and as none was made in the United States prior to that time, it is to be presumed that this represented the annual consumption at that time. It has probably increased since then.

The present source of importation of this article is Ameersfoort, Holland—at least, that is given as the source. It is noteworthy that during the World War no artificial oil of mustard was shipped to this country from Holland, although shipments of the natural oil came through frequently. As soon as the German-Holland frontier was opened offers were made.

According to reports from the War Trade Board, 2,739 pounds have been imported under license. Quite a quantity was imported before the War Trade Board and Revenue Department functioned coordinately. The product imported bears evidence of age and deterioration and has been offered at various prices ranging from $8 to $3.05, the lower quotations being offered our contract consumers.

As there is no clause in the present law which names artificial oil of mustard (allylisothiocyanate) or other compounds of allyl, we suggest that it be placed under a new classification of synthetic organic chemicals not derived from coal tar, and that a duty of $3 per pound be placed on allylisothiocyanate (artificial oil of mustard) and all other compounds of allyl. The necessity for mentioning all other allyl compounds is that it would be possible to import intermediates, such as allyl chloride or allyl bromide, then finish the product here. We may remark that these intermediates have never formed articles of commerce. Artificial oil of mustard now is included, we presume, in paragraph 46 under the expression "all other essential oils," and the present duty is 20 per cent ad valorem.

We again urge the necessity of a specific duty, as no matter what the ad valorem, protection can easily be defeated, as the consumption is small, and if past practices are any criterion the article could be practically given away until American manufacturers were forced to retire from business.

We have no suggestion to make regarding administrative features of present law, except that for a while there was some lack of coordination between the War Trade Board and custom officials, due to a misinterpretation of the War Trade Board's orders. This, we believe, has been straightened out.

We, however, feel that the artificial oil of mustard being imported from Holland is really of German origin. This feeling is based entirely on statements made to us by buyers of essential oils who have returned from trips abroad.

A. F. LAYMAN, *Manager*.

OPIUM.

[Paragraph 47.]

BRIEF OF MCKESSON & ROBBINS (INC.), NEW YORK CITY.

SIR: We respectfully recommend that the rates of duty now imposed under paragraph 47 of the tariff act of 1913 be continued.

The Harrison Narcotic Act, as amended by the revenue act of 1918, imposes an internal-revenue tax of 1 cent per ounce on the crude opium, which tax attaches each time the original stamped package is subdivided, and which is again assessed upon each ounce of the salt, derivative, or preparation manufactured. This tax is, therefore, paid at least twice and in many cases three times or more.

We therefore submit that no greater exaction should be imposed than now assessed by the combined duty and internal-revenue tax.

We would also recommend that the words "containing not less than 9 per centum of morphia" be omitted, and also the words "opium containing less than 9 per centum of morphia, $6 per pound." These provisions, which classify crude opium into grades and impose different rates of duty thereon, have been carried into several successive tariff acts, and were originally inserted to cover smoking opium, the importation of which is now prohibited by law.

We would also recommend that the following wording which prohibits the withdrawal from bonded warehouses for exportation of preparations of opium, without the payment of duty or with a refund of duty, if it has been paid, be omitted: "but preparations of opium deposited in bonded warehouses shall not be removed therefrom without payment of duties, and such duties shall not be refunded."

This provision is also one which has been embodied in several previous tariff acts and which has no present application.

PERFUMERY.

[Paragraphs 29, 46, 48, 49, and 561.]

A. M. SPIEHLER, CHAIRMAN TARIFF COMMITTEE, MANUFACTURING PERFUMERS' ASSOCIATION OF THE UNITED STATES.

Mr. SPIEHLER. Adolph M. Spiehler, Rochester, N. Y.

Mr. Chairman, and members of the Ways and Means Committee, I appear before you as chairman of the tariff committee of the Manufacturing Perfumers Association of the United States. Our association is a thoroughly representative organization of the industry engaged in the production of perfumery and toilet preparations, our membership including all the important manufacturers and a substantial majority of the smaller ones. Our associate membership also embraces importers of raw materials and certain houses which both import and manufacture such materials. In addition we also include a few houses the operations of which are confined to the manufacture of perfume raw materials.

The work of the tariff committee of this association was begun promptly upon the announcement of your committee that hearings were to be held looking to the revision of the tariff law, but owing to the shortness of the time at our disposal we have been obliged to work with great rapidity in order to prepare ourselves to present to you the consensus of the views of our industry respecting the paragraphs of the tariff law in which we are interested, namely, paragraphs 29, 46, 48, and 49 of Schedule A, and paragraph 561 of the free list. We assume that, in addition to the data which in the limited time at our disposal we are able to present to you to-day, you will call upon us for supplemental information when the actual work of drafting the new tariff bill is begun, and we wish to assure you that our committee will at all times be at your disposal and will be glad to respond in any way that you may desire.

In order that our tariff committee might be informed as to the views of the individual members of our association before attempting to present any revision project to your committee, a questionnaire was sent out to our entire membership, and upon the replies received a tentative project was framed which was subsequently submitted to the board of directors of our association for approval. There was such general unanimity in the views expressed by our members in response to our questionnaire, that our board, after full consideration, approved the suggestions framed by our tariff committee, which we beg leave to submit herewith.

We desire at the outset to preface our brief statement with a reference to a condition of overshadowing importance to our industry, but concerning which we will not attempt to elaborate our views, as we understand that, because the problem is one which affects nearly every domestic industry called upon to face foreign competition, your committee is already giving it serious consideration. We refer to the dislocation of foreign exchange which has introduced a factor of uncertainty into all tariff calculations or estimates concerning adequate measures of protection. At this juncture we content ourselves with the statement that there is probably no American industry which has been so completely demoralized with respect to foreign competition, as the result of the depreciated circulating mediums of

foreign countries, as that engaged in the production of perfumery in the United States. This will be most graphically illustrated to you when we say that the depreciation of the French franc has been met in the case of the cost of our raw materials by increased prices on the other side, while the American importer of the finished French perfumes with which our goods compete is able to buy his products substantially on the basis of the depreciated franc.

Now, I can illustrate that very well by the present prices. You gentlemen have probably noticed advertisements in the newspapers and magazines, where they are advertising certain well-known manufactured face powder and perfume and other toilet preparations at practically one-third of their regular price.

Mr. GARNER. Why is it that they are keeping these prices so low, when we have the exchange rates in our favor?

Mr. SPIEHLER. Well, it is for the simple reason that these raw materials are controlled.

Mr. GARNER. And the manufactured articles are not controlled?

Mr. SPIEHLER. Absolutely not. There is competition.

Mr. GARNER. I do not understand just what is the object of the French Government in controlling the raw materials exclusively, and not having anything to do with the export prices of the finished product.

Mr. SPIEHLER. I will cover that point a little bit later.

Our industry has made satisfactory progress during the past seven years, but this progress has been due largely to fortuitous circumstances rather than to the unrestricted operation of the existing tariff law. In fact, during the past year, since the resumption of more normal conditions, we have been made to feel the full force of foreign competition, which we believe is only a foretaste of what is to come unless a reasonable amount of readjustment is made in the customs tariffs related to our industry and unless some drastic remedy is found for the present condition due to depreciated foreign exchange.

In common with many other industries we have been favored by the general prosperity of the country and by those conditions which have made money plenty and which have disposed our people to spend it freely. That these abnormal conditions have ended is apparent to all, and the future existence of our industry must depend in large part upon the wisdom of Congress in framing legislation to tide us over the impending crisis and enable us to establish ourselves on a firm and enduring foundation.

Although our chief competition comes from France, the finished products of which are now being entered at our custom houses on a basis of about one-third the prices prevailing a year ago while the cost of our imported raw materials shows an actual advance to us of upward of 300 per cent, we have not been unmindful of the feeling of friendliness which the people of the United States as a great nation entertain toward our war-stricken sister, and we believe that considering France as the source of both our raw materials and finished products, the relatively slight changes which we propose in the existing tariff will not be found to be hurtful.

We do not feel, however, that we would discharge our obligation to your committee to supply it with basic information concerning our industrial position if we failed to call attention to the measures

which the French Government and French people have taken to safeguard their industry and to protect and stimulate its growth even during the darkest days of the war. The basic industry received the most paternalistic protection throughout the period of war during which it was treated as a special favorite, entitled to fuel, labor, raw materials, and transportation, and did not suffer any of the restrictions with which our industry in this country was constantly threatened, including classification as a nonessential with consequent deprivation of all the facilities necessary to continuous operation. Within a recent period, the flower growers of France have been permitted to organize themselves into an association, the effect of which has been to provide the French industry manufacturing finished perfumes with an adequate supply of raw materials at moderate prices while buyers of such materials for American manufacturers have been obliged to content themselves with what was left and with prices substantially higher than those paid by our French competitors.

I believe this touches your point.

Mr. GARNER. Now, it seems strange to me that the French sell their articles cheaper at home than they do when exporting them, and with the Germans, just the reverse is true. They sell their goods at home at a higher price than when they export them.

For the life of me, I can not understand these different policies which foreign people adopt when they undertake to do business with the outside world. You are complaining that they sell their goods higher at home than they do when they ship them over here, and yesterday and the day before we were told by witnesses appearing here that the goods were sold cheaper when shipped over here than they were when they were sold to their own people in Europe.

Mr. SPIEHLER. That is not the case with regard to perfumes. I can not speak for the general chemical industry. I am not familiar with that part of the business. That is a different branch of the business. These particular materials are higher in the United States than they are on the other side. That is true with regard to the particular line that I have reference to. With regard to the remarks I have just made, the French Government has always been very anxious to father and further the perfumery industry of France, and that is why they are so generally sold throughout the world.

They are near the base of supply of absolutely all of the raw materials. The raw materials are made in France, in the southern part of the country, and we, all perfumers, have to go to France to secure them. They have an absolute monopoly on that business simply on account of the flowers. There have been attempts to raise the flowers in this country, and in other parts of the world, but not successfully as yet.

A consideration to which our tariff committee has given much attention and for which we believe our revision project makes due provision is the comparatively small but none the less important branch of our industry which has developed to a substantial degree during the war and largely because of the trade interruption incident thereto and which is engaged in the manufacture in this country of so-called synthetic perfume materials.

Notwithstanding the fact that any increase in protection afforded this industry will for a long time to come increase the cost to us of these materials we bespeak the extension to these houses of the

same principle of protection which we invoke for ourselves. We do not think that any industry can justly claim at your hands protection for its finished products if it is not willing to accord protection to domestic concerns which with a reasonable tariff can supply it with raw materials of adequate quality and at fair prices.

We are not unmindful of the fact that the products of our industry are sometimes inconsiderately referred to as luxuries and all too frequently in the framing of emergency revenue legislation have been selected to bear a disproportionate burden of taxes especially in the way of internal revenue impost. We desire, however, to remind you that the progress of medical science, of sanitation, and hygiene have greatly emphasized the important position occupied by our products in the maintenance of the public health. It certainly requires no argument in this presence to refute the suggestion that toilet soaps, tooth pastes, tooth powders, liquid dentifrices, mouth washes, talcum powders, and antiseptic solutions of all kinds are luxuries. All of these products are included among the essential supplies of every hospital in the land. They are to be found in every well-appointed bathroom, in all nurseries, and in sick rooms. They contribute not only to personal comfort and cleanliness, but they are relied upon alike by physicians, surgeons, and nurses as valuable adjuvants in restoring and maintaining health. We believe it to be a fair statement that any prejudice that may have existed at any time against the bulk of our goods as luxuries has waned in direct proportion to the increased attention given by our people to personal cleanliness.

Before taking up for discussion the detailed suggestions we are prepared to make with respect to the revision of the paragraphs of October 3, 1913, in which we are interested, we desire to acknowledge the very generous measure of assistance accorded us by the United States Tariff Commission and congratulate the Ways and Means Committee upon the fact that, owing to the industry and intelligence of the experts of the commission, you now have before you surveys of our industry here and elsewhere which for accuracy, comprehensiveness, and exhaustive treatment have never been approached in any preliminary tariff literature placed at your disposal.

The provisions of the tariff act of October 3, 1913, in which we are interested, are paragraphs 29, 46, 48, and 49.

You are all thoroughly familiar with those, so I will not take the time of the committee in reading those particular paragraphs, but I would like to read the particular changes which we propose to make in paragraph 29. In paragraph 29 we ask the elimination of the term "esters." The esters used in our industry would be included in paragraph 49.

Then, the change in paragraph 46, as we would have you change it, would be so as to read as follows:

46. Oils, distilled and essential: Orange and lemon, 10 per centum ad valorem; allspice (berries), ambrette seeds, cedarwood, cedarleaf, patchouli, cloves, 20 per centum ad valorem: *Provided*, That no article containing alcohol shall be classified for duty under this paragraph.

We have omitted from paragraph 46 the phrase "and all fruit ethers, oils, and essences, etc," for the reason that they are not of interest to our industry and we do not wish to make any suggestions in reference thereto.

Our suggestion for the amendment of paragraph 46 involves a new classification of distilled and essential oils, omitting several which are embraced in the existing law because they are of little or no present importance to our industry, and including by name other oils which, since the passage of the present tariff act, have come to be of industrial importance. These oils which in our opinion need protection, because of the fact that they are made in this country under promising conditions, we have included in paragraph 46. The remainder we propose to transfer to paragraph 561 of the free list, as they were in the act of 1909. Those goods are not produced in this country and in our opinion can not be and we see no reason why they should be made dutiable. Until the passage of the present tariff law all these oils were free of duty and, inasmuch as those which we propose to add to paragraph 561 of the free list are not produced in this country, and in our opinion can not be, we see no reason why they should be made dutiable. The revenue that would be derived therefrom would be negligible and insufficient to justify increasing their cost to the American perfume industry. Several of the oils, like citronella and geranium, are used as raw materials for our newly established synthetic perfume material industry which should be able to procure them at the lowest possible cost.

We have also eliminated from paragraph 46 "all combinations of" distilled and essential oils, but have taken care of them under amendments which we suggest in paragraph 49 at a somewhat higher rate of duty than that governing the articles embraced in paragraph 46.

Mr. FREAR. May I ask a question there? Do you know what that was based on before, when it was transferred from the free list?

Mr. SPIEHLER. I do not know why it was passed from the free list in the act of 1913. Within my recollection that is the only tariff law imposing a duty on these perfumery raw materials and essential oils.

Deferring for the moment comment on paragraph 48, which comes next in order under the present law, but which, because it relates to finished products, should logically follow those paragraphs dealing with crude and partly manufactured materials, we now take up paragraph 49 which, pursuant to a suggestion which we have adopted from a draft prepared by the United States Tariff Commission, we have recast. We propose to transfer to the free list ambergris, civet, musk (grained or in pods), enfleurage greases, and floral essences or flower concretes, and all natural odoriferous aromatic substances and essential oils used in the manufacture of perfume: Provided that same are not mixed and not compounded, do not contain alcohol, and are not otherwise specially provided for. Adopting our suggestion, paragraph 49 will then read as follows:

49. (a) Odoriferous or aromatic chemical substances obtained from essential oils or from natural or chemical products, not mixed nor compounded, 20 per centum ad valorem;

That is what it is now—

(b) All compounded preparations, mixtures, and combinations of essential oils, distilled oils, odoriferous or aromatic substances or natural floral products, used in the manufacture of but not marketable as perfumes or cosmetics, and not containing alcohol and not specially provided for in this paragraph, 25 per centum ad valorem.

It will be observed that in subdividing the articles enumerated in paragraph 49 we have provided two classifications, one including the primary or uncompounded products at the rate of 20 per centum ad valorem, which is the rate they now pay, and the other embracing the compounds or mixtures which logically should pay the higher rate of 25 per centum ad valorem.

Mr. HAWLEY. You prefer an ad valorem to a specific rate?

Mr. SPIEHLER. We believe that it is almost impossible to apply a specific duty, on account of the great fluctuation in prices of the materials.

As an example, a specific duty of 25 cents on peppermint, which is ordinarily worth around $2, might have some effect on production, but when peppermint is around $8 to $10 per pound, it means that you have duty which does not amount to anything.

Mr. HAWLEY. You also suggest a declaration in the case of undervalued goods abroad?

Mr. SPIEHLER. Well, on these general products we have a market value unless some new synthetic compounds may be produced; in that case I think it will be very easy to determine a differential, as to their true value.

Mr. HAWLEY. Would it be possible to determine the American value as to these goods, so that the duty might be levied at an American value instead of the value in the country of origin.

Mr. SPIEHLER. You refer to our own product?

Mr. HAWLEY. Those of which you are speaking.

Mr. SPIEHLER. Yes, they have a market there, and a market value here.

Mr. HAWLEY. Could it be readily ascertained by the customs authorities?

Mr. SPIEHLER. I think so.

Mr. GARNER. Did you hear the gentleman testify a while ago, just prior to you?

Mr. SPIEHLER. Yes, sir.

Mr. GARNER. Did you hear him say that it was impossible to tell whether they were worth $20 a pound or were only worth $5 per pound?

Mr. SPIEHLER. That is with regard to only one class.

Mr. GARNER. But you did not make any exceptions in answering Mr. Hawley's question, and you said it should be done.

Mr. SPIEHLER. No; they can not do it on all. I meant on the absolutely raw materials; I had reference to the raw materials. I would like to differentiate between the raw materials and the compounds.

Mr. GARNER. But I think he had reference to these particular articles and said that it would be impossible to ascertain the value of certain compounds.

Mr. SPIEHLER. On the compounds, it would be hard to ascertain their true value.

Mr. GARNER. That would be in addition to the fact that the American prices in one section of the country might be different from prices in another section of the country.

Mr. SPIEHLER. No; that is not the difficulty. The difficulty is with regard to knowing what is in the compound and their values. The raw materials have a market price.

The CHAIRMAN. Mr. Spiehler, it is just as difficult to ascertain the price in the foreign countries, if not more so, than it is to discover the American value, is it not?

Mr. SPIEHLER. Absolutely, Mr. Chairman. You can not tell anything about it.

Mr. LONGWORTH. Except by their own invoice value.

The CHAIRMAN. And there might be a question as to whether the invoice value is correct or not.

Mr. SPIEHLER. Well, that is the question, of course.

The CHAIRMAN. It is left entirely to the foreigner and the American consul abroad.

Mr. SPIEHLER. Absolutely.

The CHAIRMAN. Here, our tariff board could get the values of every article, and they could arrive at the average price.

Mr. SPIEHLER. Yes, sir; but I desire to make it very clear that the only thing we would have it apply to is to the compounds. When the raw materials come in unmixed, uncompounded, it is not difficult to find their true value, but where they are compounded, no one can find their value except the manufacturer who compounded them. You can not ascertain their true value.

It will be observed that in subdividing the articles enumerated in paragraph 49 we have provided two classifications, one including the primary or uncompounded products at the rate of 20 per centum ad valorem, which is the rate they now pay, and the other embracing the compounds or mixtures which logically should pay the higher rate of 25 per centum ad valorem.

Under paragraph 49 that branch of our industry engaged in producing synthetic perfume materials in this country will receive a substantial amount of additional protection. This is brought about, first, by the transfer to the free list of certain oils which are used in the manufacture of synthetic products and which, therefore, would be made available at lower cost, and second, as the result of raising the tariff rate on compounds and mixtures from 20 to 25 per centum ad valorem.

In connection with the articles embraced in paragraph 49 the tariff committee of the Manufacturing Perfumers' Association has found itself embarrassed by a situation which has recently become a decided menace to our entire industry, but for which we frankly admit we have not yet been able to find an adequate remedy. We crave the very serious attention of the Ways and Means Committee for this phase of our problem and will welcome any suggestions it may be able to offer.

For a number of years there has been a slow but steady increase in the importation into the United States of goods brought in by the American representatives of foreign houses and others which, while entered for duty as perfume materials, have lacked only the addition of alcohol, and in some instances, some other less essential material, to render them merchantable as finished perfumes. Within the past few months the importation of these practically completed goods has increased to an alarming extent, thus offering a severe form of competition with our industry, especially as in many cases these goods have been made up to imitate the most popular odors that have been developed by American perfumers. It is hardly necessary to call attention to the fact that the Government is losing a large amount of

revenue on these goods which it would receive if they were classified as finished perfumes.

At first blush it would seem a comparatively simple matter to adopt a new classification for these nearly finished products at a rate of duty approaching, if not equalling, that paid on finished perfumes, but a serious difficulty has arisen in this connection owning to the fact that any classification which we have been able to devise, that would impose a special rate of duty upon these practically finished goods, would include in the same category practically every compound or mixture imported as a raw material by the domestic perfume manufacturer. Obviously, we do not wish to penalize our entire industry by imposing a practically prohibitory rate of duty upon our raw materials for the purpose of increasing the rate paid on these practically finished goods, especially in view of the belief which is generally entertained throughout our industry that the importers of these nearly finished products would not be deterred from bringing them in even should they be made to bear a rate now imposed upon completely finished perfumes.

In this connection we can not do better than invite your attention to the following extract from the survey of the United States Tariff Commission on "Natural and Synthetic Odoriferous Substances, Preparations and Mixtures:"

> The second of the two classes referred to above, namely, the natural and synthetic mixtures, can not be so easily defined. The first class is made up of definite chemical substances, which may be identified readily by means of well-known chemical and physical properties. The second class, on the other hand, consists of mixtures and combinations, each of which may be made up of a half dozen or more different natural or chemical constituents. Certain of these mixtures are of known composition, but in most cases they are marketed under trade names and their composition is guarded as trade secrets. There are a number of flowers, such as the lily of the valley, honeysuckle, sweet pea, and lilac, from which the odorous principles can not be extracted commercially, and for which the perfumer is dependent upon artificial means of reproduction. However, practically every flower odor and natural essential oil is imitated by a so-called "synthetic-flower oil" which for certain purposes may be regarded as a more or less satisfactory substitute. The term "synthetic" as thus used is a misnomer, since these synthetic oils are usually mixtures of different constituents, some of which may themselves be synthesized, while others may have been isolated from essential oils or extracted from flowers. One class of these preparations of especial tariff interest is made up of highly manufactured products in which a large number of both natural and synthetic materials have been skilfully compounded to produce a product which can be converted into a finished perfume by the simple addition of alcohol. In other cases, perhaps two or more of these preparations may be required for the finished perfume, but even then the preparation of the final product requires comparatively little skill.

The finished products of our industry are included in paragraph 48 of the present law and concerning this paragraph we have no recommendation to make except that the concluding clause "floral or flower waters containing no alcohol not specially provided for in this section, 20 per centum ad valorem," should be eliminated and such waters transferred to the free list. The paragraph, if amended in accordance with our recommendation, would read as follows:

> 48. Perfumery, including cologne and other toilet waters, articles of perfumery, whether in sachets or otherwise, and all preparations used as applications to the hair, mouth, teeth, or skin, such as cosmetics, dentifrices, including tooth soaps, pastes, including theatrical grease paints, and pastes, pomades, powders, and other toilet preparations, all the foregoing, if containing alcohol,

40 cents per pound and 60 per centum ad valorem; if not containing alcohol, 60 per centum ad valorem.

Concerning the elimination of floral and flower waters from the above paragraph, we beg to point out that these articles are merely the by-products of the distillation of essential oils from flowers in the foreign countries of origin and although they are of substantial importance to our domestic manufacturers, they are not and can not be produced in this country. Incidentally, we would draw attention to the fact that some of them have an important use in the manufacture of medicines.

In connection with the duty on finished perfumery, we wish to call attention to a somewhat anomalous situation that has developed respecting the duty upon the containers thereof. When perfumery is imported in plain glass bottles the containers, by the operation of paragraph 83, are subject to the same ad valorem rate of duty as their contents, namely, 60 per centum. In certain customs decisions (Abstracts 41682 and 41692, of 1918), it has been held, however, that when perfumery is put up in cut or decorated bottles the containers are separately dutiable at the lower rate of 45 per centum ad valorem under paragraph 84. This decision is based upon the principle that the more specific designation of "cut-glass bottles," as found in paragraph 84, must govern appraising officers rather than the general term "glass bottles" "containing merchandise subject to duty," as found in paragraph 83. We think that the provisions of paragraph 83 should be so amended as to impose upon all glass containers the same rate of duty applicable to their contents irrespective of the character of such containers.

In conclusion, if the changes we have already suggested are adopted it will be necessary to amend paragraph 561 of the free list of the present law in order to include those natural raw materials which we are proposing to eliminate from paragraphs 46 and 49 of Schedule A. This paragraph will then read as follows:

561. Ambergris, civet, musk (grained or in pods); oils: anise, bay, bergamot, birch tar, bois de rose femelle, cajeput, cassia, citronella, cocoanut, cod, cod liver, cottonseed, croton, eucalyptus, geranium (Algerian, Bourbon and Turkish), ichthyol, juglandium, lavender, aspic or spike lavender, lemon-grass, linaloe, neroly or orange flower, otto of rose, palm, palm kernel, perilla, rosemary, sandalwood, thyme, vetivert, enfleurage greases and liquid and solid primal floral essences or floral concretes not compounded, floral or flower waters, and all natural odoriferous aromatic substances and essential oils used in the manufacture of perfumes provided that same are not mixed and not compounded, do not contain alcohol and are not otherwise specially provided for in this act, soya-bean, and olive oil rendered unfit for use as food or for any but mechanical or manufacturing purposes, by such means as shall be satisfactory to the Secretary of the Treasury and under regulations to be prescribed by him; Chinese nut oil, nut oil or oil of nuts not specially provided for in this section; petroleum, crude or refined, and all products obtained from petroleum, including kerosene, benzine, naphtha, gasoline, paraffin, and paraffin oil; and also spermaceti, whale, and other fish oils of American fisheries, and all fish and other products of such fisheries.

In our discussion of paragraphs 46 and 49 of Schedule A we have presented briefly our reasons for seeking to extend the category included in paragraph 561.

We also suggest paragraph 29 be changed to read as follows:

29. Ethers: Sulphuric, 4 cents per pound; amyl nitrite, 20 per centum ad valorem; amyl acetate and ethyl acetate or acetic ether, 5 cents per pound; ethyl chloride, 20 per centum ad valorem; ethers of all kinds not specially

provided for in this section, 20 per centum ad valorem: *Provided*, That no article containing more than 10 per centum of alcohol shall be classified for duty under this paragraph.

BRIEF OF ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

PERFUMERY AND TOILET PREPARATIONS.

The present rates of 40 cents per pound and 60 per cent on perfumery and toilet preparations containing alcohol and of 60 per cent if not containing alcohol, with the additional duty on glass containers at the rate of 45 per cent, if ornamented or decorated, are equal on the average to an increase of value of 110 per cent. No higher rates could be levied on articles, which, although considered luxuries, are not always really such, as in the case of dentifrices and hair lotions, which are usual articles of cleanliness and hygienic use. Importations in this class of commodities is represented by specialties identified with an established reputation in the country of origin and the brand of the manufacturer and patronized chiefly by the foreign element of our population, and do not enter into competition with the domestic article, whose manufacturers have the advantage of cheaper basic material (alcohol, fats, soaps, fillers, packing material, etc.). The present high rates have defeated in many cases the purposes of revenue by killing importations entirely.

This chamber believes that while a readjustment of rates on a more rational and equitable basis, with lower duties on articles which are a necessity and not a luxury would yield more revenue and prove beneficial to consumers without prejudice to American manufacturers, should this not be feasible, it recommends that they remain t least unchanged as they are at present.

BARYTES.

[Paragraph 51.]

C. P. DE LORE, REPRESENTING THE MISSOURI BARYTES LITHOPONE ASSOCIATION, ST. LOUIS, MO.

Mr. DE LORE. Mr. Chairman and gentlemen, I am a manufacturer of ground barytes. I entered the industry about March 1, 1907.

I am going to confine my remarks principally to ground barytes and say as little as possible, and ask for the privilege of filing a brief.

Mr. HAWLEY. That privilege is already granted, sir.

Mr. DE LORE. Thank you. The only known or developed deposits of any extent of crude barytes ore are in the United States and Germany. My belief is that the extent of the deposits in the United States will exceed those of Germany. Up to the time that Germany entered the war they supplied the market of the world, excluding the United States, with ground and crude barytes. They also exported to the United States large quantities of crude barytes and a sufficient quantity of ground barytes to force the American manufacturers down to such a point of selling price that the industry was not at all attractive. The industry in the United States, I believe the history of it previous to the time that Germany entered the war, was a failure so far as ground or crude barytes was concerned, due entirely to the very low labor cost of producing the crude ore and manufacture of ground barytes in Germany as compared with the United States, and also the very low transportation rate. Both crude and ground barytes were brought into the United States and I presume to all other countries as ballast for ships. It is very well adapted for that.

As soon as Germany entered the war the United States did not only supply the entire requirements for ground barytes of the United States and Canada but also exported a large quantity to the United Kingdom, Japan, and South America.

As to the tariff proposition, in 1912 and 1913, we were compelled to sell ground barytes in New York at $17.40 a ton in order to meet German competition, at which time there was a tariff of $5.25 a ton, netting the Germans then $12.15 a ton in American money, if they sold at the same prices that we did. Our prices to-day delivered at New York, with the tremendous increase in freight rates, is $36.50 per ton of 2,000 pounds. With a $20 per ton duty or 1 cent a pound it would enable the Germans to secure $16.50 per ton of 2,000 pounds of ground barytes in American money, as you will see, a substantial increase. Besides which, of course, the exchange value is a very important factor.

I also wish to say that the profit on the selling price of ground barytes is less per ton than it was previous to the war. The reason for that is our opportunity for sale was very limited and our greater tonnage has enabled us to accomplish it, and I am absolutely firm in my belief that if this industry, which deserves protection, is given protection, that the industry will thrive and develop, so that in the future, so far as American consumers are concerned, they will get as cheap or cheaper barytes than they would if it was killed by a protective tariff.

Mr. HAWLEY. Do you suggest rates?

Mr. DE LORE. I am merely suggesting that because there has been a bill introduced by Congressman Rhodes, from Missouri, placing a tariff of a half cent a pound on crude barytes and 1 cent a pound on ground barytes. I am just giving you the suggestion if such a tariff is adopted. At present quotations of German barytes, a $20 tariff would not put us on an equal basis, I believe.

Mr. BACHARACH. That is, you want it increased from $5.25 to $20 a ton?

Mr. DE LORE. Twenty dollars a ton, I believe, is very necessary to foster the American industry of ground barytes.

Mr. HADLEY. Is your plant in Missouri?

Mr. DE LORE. Yes; St. Louis.

Mr. HADLEY. Who are the foreign competitors.

Mr. DE LORE. In Missouri?

Mr. HADLEY. No; where does the foreign competition come from?

Mr. DE LORE. Germany.

Mr. HADLEY. Altogether?

Mr. DE LORE. Altogether Germany.

Mr. HADLEY. What is your freight?

Mr. DE LORE. Nine dollars a ton.

Mr. HADLEY. Do you know what the German freight is?

Mr. DE LORE. I don't know. I have been told they have a freight of $3.50 per ship-ton from Hamburg. Before the war the freight was, I believe, about $1.25.

A. E. STOCKING, REPRESENTING THE MISSOURI BARYTES LITHOPONE ASSOCIATION, ST. LOUIS, MO.

Mr. STOCKING. Mr. Chairman and gentlemen, I am representing the Missouri barytes producers, and wish to discuss paragraph 51 of the tariff act of 1913.

I am mining in the Washington County district of Missouri and have been engaged in it the past five years.

The condition of the barytes—or as we call it in Missouri, the "tiff"—industry prior to the war was very uncertain. There were times when we could sell tiff, but a large percentage of the time, possibly 35 or 40 per cent of the time, we could not. The wages paid to miners at that time was approximately $1.80 per ton. To-day they are receiving $5.60 per ton and were able to sell all the ore they produced up to the present time. In the latter part of December all of the companies that had been buying ore cut off their shipments and at the present time there is no market for the ore.

The survey of the barytes deposit made by the Geological Survey comprises 250 square miles in Washington County, or 160,000 acres. That is in Washington County alone where the ore has been mapped, and only where the ore is produced. The other sections of the State have not been mapped at the present time.

You will find barytes ore occurring in the Potosi and Gasconade formation principally. There is also some in the Roubidoux and Jefferson City; and these formations occur throughout quite a large portion of the southern area of the State.

Missouri is not the only State in which barytes is found. It occurs in Connecticut, Maryland, Virginia, North Carolina, South Carolina, Alabama, Georgia, Kentucky, Tennessee, Illinois, Texas, New Mexico, Wisconsin, Arizona, California, Utah, Nevada, and Idaho. So you see it is widely scattered throughout the United States.

The average prewar production in Missouri for the years 1910 to 1914, inclusive, were about 26,000 tons; the years 1915 to 1918, the average per year was 51,000 tons. In 1919 there were 60,000 tons produced and in 1920 there was over 90,000 tons produced, probably close to 100,000 tons.

Mr. BACHARACH. You are talking now about the total production in this country?

Mr. STOCKING. I am talking about the total production in Missouri.

Mr. BACHARACH. In Missouri?

Mr. STOCKING. Yes; and the larger part of that is in Washington County.

In order to raise production over prewar figure it was necessary to build houses for the miners and in addition to being furnished houses free of rent they are also furnished their firewood and garden patches. The reason that the production of barytes in Missouri is principally around and in Washington County is due to the fact that Washington County was among the first settled by the French, along about 1700, I think. In fact, Potosi is the second oldest town in the State; and the way the miners first went there, the Indians came down to St. Genevieve, Mo., and told them about the white metal that was found in that country. They went up there expecting to find silver ore and instead they found lead ore, and the miners to-day are descendants of those early settlers.

All of this mining is done with pick and shovel for the reason that there has been no stability to the barytes industry to encourage anyone in using modern methods, and I think if we get a sufficient protective tariff that modern methods will be introduced.

Mr. HAWLEY. What rate are you suggesting?

Mr. STOCKING. Congressman M. E. Rhodes is from our district——

Mr. HAWLEY (interposing). You are in support of the Rhodes bill?

Mr. STOCKING. Yes, sir. He has given this matter a great deal of study. We do not want a prohibitive tariff. We want competition. I think with the tariff that Mr. Rhodes has asked for there will be a great deal of German barytes come into this country.

And now, I would like to read from page 958 of a report on barytes and barium products in 1918 (reading):

This ore was mined very cheaply, costing, according to consular reports, from $1.10 to $1.66 a ton at the mine, and crude German ore was quoted for delivery at New York in 1909 c. i. f. (exclusive of duty) at prices ranging from $4.50 a ton for the poorer, grayer rock, to $5.50 for the pure white mineral. As soon as trade relations are again established Germany will undoubtedly pour unlimited quantities of crude barytes and manufactured products into the United States at prices with which the American producers can not compete unless protected by a tariff.

Mr. HADLEY. Is this from the Tariff Commission report?

Mr. STOCKING. No, sir; from the report of the Department of the Interior. The German prewar price of 1909, $5.50, is based on a long ton; a short ton would be approximately $4.90. I understand they are offering ore to-day in New York at $9.61 per long ton, which would be the equivalent of $8.57 per short ton. Our freight rates from Missouri to New York are approximately $10 per ton.

I would also like to read a letter from the State geologist to myself [reading]:

BUREAU OF GEOLOGY AND MINES,
Rolla, Mo., December 23, 1920.

DEAR MR. STOCKING: Your inquiry regarding the extent of the barytes deposits in Missouri received. It would be impossible to endeavor to make an estimate of exact tonnage, as the crude system of mining does not provide any development work upon which to base estimates.

Barytes has been found throughout the Ozark region, but has been mined chiefly in Washington, Cole, Miller, and Morgan Counties, the Washington County area in the past having produced more than three-fourths of the State total and is by far the most productive area at present.

The Washington County district covers an area of about 250 square miles or 160,000 acres in Washington and the adjoining counties. Throughout this area the deposits occur irregularly in the surface clays and only the larger lump ore is recovered by the present primitive system of mining.

I should judge that 50 per cent of the ore in the dirt is lost in fines, and that less than 50 per cent of the possible productive area is actually mined, and I believe by installation of log washers and steam shovels the entire area of each deposit could be mined and a high percentage of the fines recovered. There is therefore in the deposits which have already been worked over probably several times as much ore available as has been mined.

The production of the State for 1920 will approximate 90,000 tons, of which about 80,000 will be mined in Washington County. This is the largest output ever recorded, and indicates that the deposits are capable of increased production even under the primitive system of mining.

Much of the area in which the commercial deposits occur has not been developed, and new areas are capable of producing a large tonnage.

In my judgment the districts in Missouri can even under increased production supply the requirements of the United States for years to come, and, while I can not give you an actual estimate of tonnage, it is my firm belief that the deposits will be working 50 years hence.

Sincerely, yours, H. A. BUEHLER.

W. S. PEEBLES, CARTERSVILLE, GA., REPRESENTING THE COMMERCIAL MINERS OF BARYTES.

Mr. PEEBLES. Mr. Chairman, perhaps I could give you gentlemen an idea in a better way by simply stating the history of my district. I represent the commercial operators in barytes in Georgia. Prior to the war, in 1914, there was practically no development of the

barytes interests in Georgia at all. In my particular district there was one plant operated at that time by a concern that used its own output, and they produced about 6,000 tons per year. At the outbreak of the war and the subsequent stoppage of the German barytes coming into this country, the barytes deposits of Georgia were developed; commenced to be developed in 1915. That development has continued until at the present it has risen from a production of about 6,000 tons per year by one man to practically 100,000 tons annually by about 11 plants. There are at this time 11 active producing operations in my district.

The bulk of the crude barytes ore which is produced in Georgia goes to supply the eastern manufacturers of lithipone and other barium products in the East. Our freight rate from Georgia is about $7.10 to New York per gross ton of crude ore. I understand that there has been delivered in the last two or three months German ore at a rate of $9.75 f. o. b. New York. We can not compete with a price of that kind, as you can readily see, with a freight rate of $7.10 from our plant to the plant that consumes our product.

The production down there has risen, as I say, from one plant to 11 within the past five years. Prior to 1914 there was only one, and there are 11 now.

Our main production goes to Philadelphia and seaboard points, and we, of course, come in competition with other ores from local points, including Missouri. Our chief source of trouble and competition would be from the influx of German ore for the reason that they can produce that ore and bring it over here for a less rate almost than our freight rate would be from our plant.

Mr. BACHARACH. What is the value of your product at the mine?

Mr. PEEBLES. We have been selling, since 1916, at from $5.50 to $10 per ton—gross ton.

Mr. TREADWAY. What duty do you advocate?

Mr. PEEBLES. I would think that the duty I have heard suggested here of half a cent a pound would cover us; one-half of a cent.

Mr. HAWLEY. That is the rate proposed in the bill introduced by Mr. Rhodes?

Mr. PEEBLES. I would think so; yes, sir.

STATEMENT OF HON. MARION E. RHODES, A REPRESENTATIVE IN CONGRESS FROM MISSOURI.

Mr. RHODES. Mr. Chairman and gentlemen of the committee, my name appears on your docket to-day as representing "Missouri Barytes Producers." I wish it understood that I appear here in my official capacity as the Representative of the thirteenth Missouri district, because my district for 50 years has produced over 75 per cent of all the barytes produced in Missouri, and prior to 1916 Missouri stood first in the production of barytes ore. However, I am advised by the Bureau of Mines and Mining that Missouri regained first place again in 1920, and I have no doubt but she will continue to hold it.

I have a bill before this committee, H. R. 7658, which provides for a duty of one-half of 1 cent per pound on the crude ore and three-fourths of 1 cent per pound on the ground barytes. The rates of duty provided for in my bill were arrived at before the recent increase in freight rates and before shipments of German ore were

resumed into this country after the war broke out in 1914, and therefore are not high enough.

To-day Missouri barytes ore actually costs the shipper $11 per ton f. o. b. all shipping points in Missouri. His freight rate to New York, Boston, Philadelphia, and all points east of Pittsburgh is from $9 to $11 per ton, thus making it cost, at an average freight rate of $9.50 per ton, exactly $20.50 per ton for every ton of ore delivered in Philadelphia. The German importer now offers to lay down barytes ore in the same market for $9.50 per ton, or $11 per ton less than the price at which the Missouri producer can sell his ore. Thus the rate of duty of one-half of 1 cent per pound provided for in my bill on crude ore is too low, and I therefore recommend three-fourths of 1 cent per pound instead of one-half.

The manufactured product, or ground barytes, is worth to-day in St. Louis $27.50 per ton f. o. b., or, when the $9.50 per ton freight is added, the actual cost to the Missouri dealer to lay down his product in Philadelphia is $37 per ton. The German importer now offers to lay down the same product in Philadelphia for $16 per ton, thus underselling the Missouri manufacturer $21 per ton, hence the duty of 1 per cent per pound provided for in my bill is too low, and I therefore recommend 1¼ cents per pound on the ground barytes.

A number of gentlemen of technical knowledge, manufacturing chemists, I am informed, appeared before the committee yesterday and advocated rates on the barium chemicals and compounds all the way from 3 to 8 cents per pound. While I am not informed on that phase of the barytes business, I have no doubt but what they are fully justified in their claims.

But this I do know: The barytes business must be protected by a reasonable duty or the German importer will control the American market. We have an inexhaustible supply of barytes in the United States, and there is no good reason why American capital and American labor should not be allowed to enjoy the benefits of the American market.

ULTRAMARINE BLUE.

[Paragraph 52.]

The CHAIRMAN. Gentlemen, I have a letter relating to ultramarine blue which was handed to me by Congressman Andrew J. Hickey, of Indiana, from a firm in his State. I would like to have it printed in the record.

SOUTH BEND, IND., *January 5, 1921.*

Ultramarine blue is a burned pigment. Fast to light. The manufacture of ultramarine blue comprises a long process. Grinding, burning, washing, grinding in water and redrying, all together, require about six weeks to complete the various operations. The present duty on ultramarine blue is 15 per cent ad valorem. We suggest 6 cents per pound specific duty. We especially urge a specific duty and not an ad valorem duty, as none but an expert in ultramarine blue can properly appraise the color value.

In the manufacture of ultramarine blue about 50 per cent is low grade. By low grade we mean the dark coarse particles of blue. About 50 per cent is the bright, lighter shades of blue. One of the problems is to find a market for the low grades. If foreign manufacturers are allowed to dump their low-grade blue

in America with an ad valorem duty, they can easily make the business unprofitable for American manufacturers when their market for low grades is cut off.

Ultramarine blue is used in the manufacture of paper, printing inks, paints, oil cloth, window shades, linoleum, rubber, also for wash blue. The demand for ultramarine blue in wash blue is considerably on the increase, also in paint and color varnish.

The present foreign sources of competition are Germany, Belgium, France, and a growing industry in Japan. Labor constitutes 50 per cent of our cost. Our average wage scale is $6 per day of 10 hours. We have no knowledge of the present wage scale in Germany and Belgium; prior to the war it was one-fourth to one-fifth of the wages paid in America. In Japan the wage scale is less than one-eighth of our present wage scale. There are no improved methods or machinery. We have the same machinery and processes as used abroad.

We have a heavier initial cost of plant and cost of plant maintenance. In view of the above facts, we ask that you give us a specific duty of 6 cents per pound.

THE RUSS COMPANY.
(Signed) CHAS. E. RUSS.

The following are the manufacturers of ultramarine blue in the United States: Standard Ultramarine Co., Huntington, W. Va.; Heller & Merz Co., Newark, N. J.; International Ultramarine Co., Rossville, Long Island; the Russ Co., South Bend, Ind.

The CHAIRMAN. I also have a brief submitted by the International Ultramarine Co., New York, N. Y., and the Heller & Merz Co., Newark, N. J.

BRIEF OF INTERNATIONAL ULTRAMARINE WORKS, NEW YORK CITY, AND HELLER & MERZ CO., NEWARK, N. J.

GENTLEMEN: We desire to present for your information and consideration certain recommendations and pertinent reasons for such recommendations relating to the rates of duty imposed on ultramarine.

Ultramarine is industrially the most important blue mineral pigment and is the coloring matter universally used in the household for the bleaching and bluing of white fabrics. For such laundry purposes it is marketed and sold as laundry or wash blue in various physical forms and shapes, generally as small balls, cubes, cylinders, etc. Ultramarine industrially finds wide application in the manufacture of paint, paper (both white and colored), textiles, printing ink, linoleum and oilcloth, rubber, soap, colored cement and tile, artist's colors. It is the most brilliant and light fast pigment known and for this reason is so widely used in the industries.

Ultramarine is manufactured by heating to a high temperature a mixture of china clay, silica, soda ash, sulphur, and pitch, and grinding and levigating the blue-tinted mass produced in the furnaces. There is capital, approximately $2,500,000, invested in the ultramarine industry in the United States, and there are about 250 employees dependent upon this industry for a livelihood. Ultramarine is an essential raw material for the textile, paper, paint, wash blue, and linoleum industries, and in this respect is analogous to dyestuffs. Although a comparatively small amount of capital is invested in its production and few employees are directly concerned in its manufacture, nevertheless the industries absolutely dependent upon it as a raw material have invested capital representing billions and employ hundreds of thousands of persons.

Ultramarine is provided for in the present tariff law enacted on October 3, 1913, under paragraph 52 at 15 per cent ad valorem. This paragraph is as follows:

"Ultramarine blue, whether dry, in pulp, or ground in or mixed with oil or water, and wash blue containing ultramarine, 15 per centum ad valorem."

Act of May 5, 1909, levied a specific duty of 3 cents per pound, which, based upon import value of this commodity during that act, was equivalent to 34 per cent. Ultramarine was provided for in the act of July 24, 1897, at 3½ cents per pound. This specific rate is equivalent to an ad valorem rate of 40 per cent ad valorem when determined on the average market price of ultramarine during the last two years of the enforcement of that act. The duty levied by the tariff law of 1865 was ad valorem, but the difficulties of appraisal under

this act soon indicated that a specific rate of duty was required in order to collect the proper amount of duties without undervaluations. In 1870 the duty was changed to a specific rate of 6 cents per pound, and continuously for 43 years until the enactment of the law of 1913 the rate of duty remained specific.

We recommend that ultramarine be specifically provided for at a specific rate of duty of 6 cents per pound. Based upon the present average market prices for ultramarine of 20 cents per pound, this specific rate of duty is equivalent to a protection of 30 per cent ad valorem.

The reason for these recommendations are as follows:

(1) Ultramarine is marketed in a variety of qualities, each quality having its own peculiar applications. These qualities have different commercial values which are dependent upon its suitability to a given application. These qualities or values can not be determined by mere external or chemical examination but are only revealed in the actual use. This makes appraisal difficult and unreliable resulting in possible undervaluations, consequently we recommend that ultramarine be provided at a specific rate of duty.

(2) The ad valorem rate of duty of 15 per cent on ultramarine in the present tariff law is not sufficient protection to domestic manufacturers in competition with foreign producers. From 1908 to October 3, 1913, when the specific rates of duty on this article were equivalent to 32 and 40 per cent, the importations never exceeded 66,000 pounds per month. During the nine months that the present law, which imposes a duty of 15 per cent ad valorem, was in effect prior to the European war, the importations increased to 78,000 pounds per month, representing approximately 20 per cent. Undoubtedly the importations would have increased to such an extent that the domestic industry would have been destroyed had not Germany, the largest exporter of ultramarine in the world, been removed as a factor by the European war. During the month of December, 1920, 433,000 pounds of this article at an import value of 8 to 15 cents per pound were imported into this country. This quantity is six times larger than any previous monthly importation of ultramarine. It is apparent that foreign producers are dumping this commodity on our markets intending to destroy the domestic industry or to seriously impair it prior to the enactment of a tariff law insuring ample protection.

(3) During the year of 1913—

	Pounds.
Austria-Hungary exported	1,652,680
Germany exported	8,222,497
France exported	3,784,637
Total	13,659,954

which is more than twice our domestic consumption. Of this quantity United Kingdom imported 3,322,112 pounds. Great Britain is contemplating licensing imports of chemicals and pharmaceuticals (which would include ultramarine) same as she has licensed imports of dyestuffs. This would leave the United States as the ultimate dumping ground for producers of this commodity. Belgium, which heretofore has never exported to the United States this article, according to recent advices, has exported 37,000 pounds in one shipment. Japan never produced ultramarine prior to the European war. Japan has entered the field of producing nations of this article and, due to her low labor costs, will undoubtedly become a world factor in the world markets.

(4) Since the average domestic market price of ultramarine is 20 cents per pound, a specific rate of duty of 6 cents per pound would be equivalent to a protection of 30 per cent. We believe, although we have no reliable information as to the cost of production of ultramarine in foreign producing countries except meager information concerning wage cost, that a specific rate of duty of 6 cents per pound, which is equivalent to a 30 per cent ad valorem duty, would protect the industry. The belief is primarily based upon the fact that during the administration of the acts of 1897 and 1909, which afforded a protection of 40 per cent and 32 per cent, respectively, the domestic industry was able to withstand foreign competition and the importations never exceeded 25 per cent of domestic consumption. It is evident that the protection afforded by these two acts adequately compensated for the difference in cost of production here and abroad, therefore a specific rate of duty of 6 cents per pound should protect the American industry.

The following table sets forth a comparison of the wages for labor paid in this industry here and abroad during the years 1914 and 1920:

Countries.	1914	1920
United States	$2 per diem	$5.50 per day.
Germany	$1 per diem	$0.90 per day.
France	$0.63 per diem	$0.90 per day (12 to 15 francs per diem).
Belgium	$0.63 per diem	Do.

The present wage cost in Germany was obtained from the Daily Consular Reports, which stated that England had estimated that the labor in Germany varied from 300 to 400 marks per week. Taking the higher figure of 400 marks and the present value of a mark, the weekly wage would be approximately $5.50, or 90 cents per day. This table shows that the wage cost in the United States during the year 1914 was 100 per cent higher than in Germany; 210 per cent higher than in France; and 360 per cent higher than in Belgium. In 1920 wages paid in the United States were 500 per cent higher than the wages paid in Germany, France, and Belgium. Inasmuch as 50 per cent of the ultimate cost of production of ultramarine is labor, it is essential to the life of our American industry that the protection be increased in order to compensate for this increased difference in cost of labor here and abroad, as shown by the above statistics.

The following data shows the costs in the United States during the years 1914 and 1920 of the principal raw materials used in the manufacture of ultramarine:

	1914	1920	Increase.
			Per cent.
Soda ash	$0.72 per 100 pounds	$2.40 per 100 pounds	230
China clay	$9 per ton	$22 per ton	144
Sulphur	$20 per ton	do	10

It is noted that the costs of these raw materials increased in about the same proportion as the wage costs during the same period of years.

(5) The low rate of exchange existing between this country and European producing countries is favorable to the exportation of merchandise from these countries to the United States. Even had the 15 per cent ad valorem of the existing act been adequate protection when rates of exchange were normal (import statistics show that this was not the case) the depressed rate of exchange alone would demand a higher rate of duty to afford protection to the American producer.

We have endeavored to clearly state that ultramarine is essential to many industries whose independence of all foreign sources of supply is necessary for the welfare of the people of the United States. We believe that a specific duty of 6 cents per pound will afford the same protection as under the acts of 1897 and 1909 and will insure the permanence of the ultramarine industry in the United States.

BRIEF OF O. T. FRICK, PRESIDENT STANDARD ULTRAMARINE CO., HUNTINGTON, W. VA.

GENTLEMEN: We wish to set forth the following facts and recommendations for your consideration in revising the tariff act of 1913, schedule A (chemical oils and paints), item 52, ultramarine blue.

The tariff law of 1909 imposed a specific duty of 3 cents per pound on ultramarine and the present law, 15 per cent ad valorem. Now, the manufacture of ultramarine, of necessity, involves the production of a large percentage of inferior grades, and no one but an expert is competent to determine the value. We, therefore, recommend that a specific duty be levied, because under an ad valorem duty high grades could easily be imported under low-grade marks, etc., and the protection intended would be thus removed. Foreign countries

have recognized this and have accorded their manufacturers a specific duty. We also recommend that the specific duty be levied at 6 cents per pound for reasons which will be given hereinafter.

Ultramarine is a mineral pigment which is used in the following industries, given in order of their importance:

Paint and varnish, as a pigment.
Linoleum and oil cloth, as a coloring matter.
Paper, for tinting, coating, and bleaching.
Printing and lithographing inks, as a pigment.
Sugar refining, as a bleaching agent.
Rubber, as a coloring matter.
Soap and candles, as a coloring matter.
Textile, for calico printing.
Cement, tile, and mosaic, as a coloring matter.
Enameling, as a coloring matter.
Artists colors, as a pigment.

In addition to the quantity consumed in these industries, a very large quantity is used as laundry blue. During the war, large quantities were used in camouflage paints, and during the period when 3-cent letter postage was in effect large quantities were furnished the Bureau of Engraving and Printing for printing 3-cent stamps.

Quoting from Tariff Information Catalogue, United States Tariff Commission file 77. article, ultramarine, page 2: "The domestic output is furnished largely by one producer," and again on page 3: "The manufacture of ultramarine is in the hands of a trust."

From 1909 to 1914, the production of ultramarine by this company was small, but with the advent of the war foreign supplies were cut off and domestic demands were multiplied. We immediately increased our facilities to meet these demands, and continued to do so until in 1920 our production reached 3,600,000 pounds. There was some shortage felt in the spring and summer of 1920, but we are just now completing additions which will prevent this situation in the future. We have no connections with any other concerns whatever, and the foregoing statement of our growth is made to show that the production of ultramarine in the United States is no longer in the hands of one concern or a trust. We know that the industry is this country is entirely capable of supplying the demands at reasonable prices; that shortages which from time to time exist are temporary only; and that large importations will not only injure the ultramarine industry, but will, by so doing, work a hardship on the aforesaid industries which use this material.

Again quoting from the Tariff Information Catalogue hereinbefore mentioned, page 2: "Domestic manufacturers are not handicapped as regards their supply of raw material or fuel," and on page 3:

1914:	Pounds.
Domestic production	2,698,639
Imports	876,688
Total	3,575,327

We wish to call attention to the fact that our 1920 production exceeds the total domestic production and imports in 1914. This shows not only the development of the industry itself, but the extent to which other industries are increasing their use of ultramarine.

All manufacturers of ultramarine are forced to import English china clay, which is almost one-third of the material cost and on which they must pay a duty. They are therefore handicapped to quite a large extent, as foreign manufacturers have easy access to this material. The following comparison of the principal items entering into the cost of ultramarine will show the difference in our costs in 1913–1915 and at present:

		1913–1915	1920
Labor	per day	$2.00	$5.00
Soda ash	per cwt.	.50	1.50
China clay	per ton	8.50	23.50

It is apparent that the items that enter into the manufacturing cost of ultramarine are now from two and one-half to three times what they were in 1913–1915; and, of course, the selling price has advanced in proportion, the old prices averaging 8 cents per pound and the prices to-day averaging 20 cents per pound. We, therefore, wish to submit that a duty to be effective now would have to be in proportion to the prewar duty, as to-day's costs and prices are in proportion to prewar costs and prices. The prewar specific duty of 3 cents per pound, which allowed as high as 10 per cent of the American consumption to be imported, should, if the same degree of protection is to be afforded now, be increased to 7½ cents per pound, but allowing for reasonable reductions in costs, we recommend a specific duty of 6 cents per pound. This rate of duty, being in proportion to costs and prices, would still allow considerable quantities of ultramarine to be imported, as did the prewar duty of cents 3 per pound.

Another item which should be given serious consideration is the fact that labor is approximately 50 per cent of the manufacturing cost of ultramarine, and that the average wage paid in the American industry is $5 per day, while in France and Belgium it is 12 to 15 francs, or about $1 per day.

Not only is there this big difference in the cost of labor but the exchange situation favors the European producers, probably more than any other one item, and while we hardly think that this would be considered in fixing the rate of duty, it shows that immediate action is necessary to prevent the importation of large quantities of ultramarine into the United States which would be in excess of the requirements of the industries using it. In fact, we know of 433,200 pounds that have been imported within the past 30 days, which is 40 per cent more than the total monthly consumption of the United States in 1914. This shows that, unless protection is given, the manufacturers in this country will suffer great losses and the entire industry will be jeopardized.

We also wish to state that the technical manufacture of ultramarine in this country is just as highly developed as in Europe, and we are capable of producing grades in quality as high and in some cases higher than our foreign competitors. We are ready to support this statement by making laboratory tests which will demonstrate the true quality of the competing products, and we invite this investigation, or comparison, of products by a Government chemist at any time.

THE STANDARD ULTRAMARINE CO.,
O. T. FRICK, *President*.

P. S.—The industry in this country is represented by the following firms: The Russ Co., South Bend, Ind.; The Heller & Merz Co., Newark, N. J.; The International Ultramarine Co., Rossville, N. Y. (S. I.); The Standard Ultramarine Co., Huntington, W. Va.

LAMPBLACK.

[Paragraph 53.]

Mr. TREADWAY. Wilkes, Martin & Wilkes will take up the subject of lampblack, paragraph 53. I have a letter this morning from a concern in Boston who manufacture lampblack, and they ask the privilege of filing a brief.

BOSTON, MASS., *January 5, 1921.*

We are, as you will see by our letterhead, manufacturers of lampblack, and lampblack, while not an aniline dye, is just as distinctly a coal-tar color as an analine dye, and is subject to the same destructive competition from Germany.

Lampblack is made from burning oils distilled from coal tar. There are four or five manufacturers of lampblack in the United States, and at the present time the cost of the tar and distilled oils from which the lampblack is made, is higher than ever before, making the cost of the black much higher. The demoralization of the mark makes all of these products very much cheaper in Germany, and in spite of the fact that the ocean freights are still high, the Germans are able to deliver a cheap black in this country at about 40 per cent under the lowest prices that can be made here. This black is now being imported.

It is significant that before the war almost no German black was brought into this country because they could not compete with our production, the costs of which were normal in both countries at that time, and are now abnormal and at opposite extremes of the pole.

There seems to be no more reason why we should permit the Germans to dump a coal-tar product called lampblack into this country than coal-tar colors called "Anilines." They are made from exactly the same base and are subject to the same competitive purposes owing to the very low cost of production in Germany at present.

We would like to be put on record as requesting a duty of 40 per cent on lampblack, and if it is desirable for me to address a brief to the committee covering the above facts I will do so, but shall be obliged to you if you will advise me in this connection and do what you can to help this matter along if you agree with the above argument.

I presume that the administrative features of the new bill will take care of matters of undervaluation, which will be of especial importance during this period.

Very truly, yours,

SAMUEL CABOT (INC.).
MARCH G. BENNETT,
General Manager.

BRIEF OF WILCKES-MARTIN-WILCKES CO., NEW YORK CITY.

We respectfully petition for an increase in the tariff on lampblack, paragraph 53, which reads as follows:

"Black pigments made from bone, ivory, or vegetable substances by whatever name known; gas black and lampblack, dry or ground in or mixed with oil or water, 15 per centum ad valorem."

We recommend that paragraph 53 in the new tariff read as follows:

"Black pigments made from bone, ivory, or vegetable substances by whatever name known; gas black and lampblack, dry or ground in or mixed with oil or water, 60 per centum ad valorem."

Our reasons for such recommendations are that the raw material used in our manufacture is a coal-tar product, viz, creosote oil. There is a scarcity of this product on account of the small production in this country. On the other hand, Germany has an exceptionally large production of coal-tar products, because she has always excelled in these and similar by-products which can be used for lampblack manufacture, which material is obtained from their large coal tar and distilling plants, which are a part of the aniline dye factories. Germany has long been the leader in this line, and therefore they will always be able to obtain their raw material cheaper than we will. We hope that the coal-tar industries in this country will grow to such proportions that eventually we will be able to obtain raw material at somewhere near their figures.

At the present time there is an overproduction of lampblack in Europe, without any buyers in France, England, Scandinavia, and the Netherlands. The Germans and English are therefore endeavoring to use the United States as a dumping ground for lampblack, and we naturally need protection for the manufacturers who have organizations of skilled workmen whom they could not replace if once this business ceased. If our factories are closed down, they rapidly deteriorate on account of the acid gas. The deterioration is so great that if a house would stand idle for six months without being used, it would practically be useless. A certain amount of heat has to be maintained at all times in order to protect the surfaces of the chambers so as to avoid even the smallest particle of grit, as this would absolutely ruin the lampblack.

Our contentions are, therefore: (1) That while it is an essential product no duty, however high, could reduce the cost of articles to the American public where lamp black is consumed, as less than 15 cents' worth is used in each rubber tire. The use in news ink could not possibly affect the cost of the finished newspaper, and as only about 2 per cent is used in the tinting of paints, it could not increase the cost there. Thus, it can not affect in any way the cost of living.

(2) That it is a direct product of tar, creosote, and as long as tar products are protected amply in the case of dyestuffs, etc., we should have the same protection.

(3) The tar industry is essential for dyestuffs, explosives, etc., and by permitting the dumping of lampblack the foreigners' tar industry is supported.

(4) Germany has already offered lampblack in the American market at prices for which the raw materials could not be purchased in the United States. We believe it is their policy to revert to dumping coal-tar products in order to have her dye and explosive industry ready at a moment's notice. England has also offered some cheap lampblack in this market.

(5) Prior to the Boer War, the German manufacturers dumped lampblack into England much below the German market prices. This black was used in the manufacture of arc carbon rods for the British (Admiralty) naval lights. When the war was declared Germany suddenly put an embargo on lampblack and arc carbons, which greatly embarrassed England to such an extent that at one time a few more hours

would have put her in peril, until she received black from America which enabled her to make more arc carbons for lights around the coast. The result of this was that the British Government insisted that the British General Electric Co. make its own lampblack for its own arc carbons, so as not to be dependent on the foreigner.

The American manufacturer needs this same protection to a vital key industry, which the lampblack industry is, as there are so many other industries dependent upon same, not only in normal but especially in war times, viz, rubber, paint, news ink, phone carbons, electric light arc carbons, insulation, artillery tires, camouflage work, aeroplanes, field telephones, polishing fine lenses for naval glasses, etc.

IMPORTANCE OF INDUSTRY.

This is one of the oldest in the United States, and is a most important one. During the war times it was classed as an essential industry and special permits were issued to us by the Government, giving preferential treatment for shipments. The above uses show what important industries it enters into; and while the number of employees is comparatively small, numbering about 600 to 800 men, still the other industries that are absolutely dependent on the lampblack industry run into the millions of men in numbers. The large rubber manufacturers employ over 1,000,000 men alone, the paint industry can be rated just as high, not considering at all the other trades, such as the printing ink, electric light carbons manufacturers, etc., and these manufacturers would be absolutely at a standstill without lampblack.

DOMESTIC PRODUCTION AND COSTS.

We are further handicapped by the low rate of exchange which enables the Germans to bring black in here now at a price below our cost. Our cost price to-day is about 13 to 14 cents, and the Germans have offered lampblack here at 10½ cents delivered New York, including receptacles. They have been importing regularly for the past year in alarming quantities. For instance, we figure that they sent over monthly three to five hundred casks and only the fact that our industries are at a standstill prevents them from dumping black in here now, but this will be resumed as soon as business picks up. This amount, even at this time, totals more than the entire production of one of the American factories. At the present price they are making, viz, 10½ cents delivered New York, receptacles included, there should be a duty of 60 per cent to keep them out and keep the American plants going and pay American labor. One of our officers has just returned from Germany, where he went to look into this situation, and he advises that the wage paid to the lampblack workmen there is between 56 and 60 cents per day of 10 hours, whereas our wages are $5.50 to $6 for an 8-hour day. Domestic production is about 15,000,000 pounds.

These are coming through Holland, originating from Germany, and also direct from Hamburg. Their labor costs are at a fraction of ours and their raw materials cost them much less, so these facts in combination with the exchange situation, makes our condition a very precarious one as soon as they begin to produce in a large way.

We therefore ask the above relief at your hands in order to protect a most important American enterprise which it has taken years to build up and on which indirectly so many laboring families depend, and also an industry which occupied such an important position during the difficulty with foreign nations, at least until the coal-tar industry here—which is essential for dyestuffs and explosives, etc.—gets in a position to compete with German manufacturers. As we have indicated above, until this state of affairs is brought about, we need a duty of 60 per cent.

Therefore, we put the matter before you, and ask you to give us that protection which this grave situation warrants.

LUTHER MARTIN,
Vice President.

Mr. TREADWAY. Mr. Chairman, I am requested by Mr. March G. Bennett, of Boston, Mass., treasurer of Samuel Cabot (Inc.), to file for him a brief on paragraph 53, Schedule A, relative to the tariff on lampblack. I ask that it appear in the record in its proper place.

BRIEF OF MARCH G. BENNETT, TREASURER SAMUEL CABOT (INC.), BOSTON, MASS.

GENTLEMEN: The undersigned respectfully petitions for an increase in the tariff on lampblack, which now appears in Schedule A, "Chemicals, oils, and paints," in the act of October 3, 1913, paragraph 53, as follows: "Black pigments made from bone, ivory, or vegetable substances, by whatever name known; gas black and lampblack, dry or ground in or mixed with oil or water, 15 per centum ad valorem."

The origin of lampblack is entirely different from that of the other substances mentioned in this paragraph. Bone black, ivory black, etc., are made from incinerated bone. Gas black is made by burning natural gas, and its production is practically exclusively confined to the United States. Lampblack, on the other hand, is made from burning creosote oil distilled from coal tar and is, therefore, just as definitely and distinctly a coal-tar color as are the aniline dyes. For this reason, lampblack is subject to the same destructive competition from Germany that the aniline dyes are, and owing to the cheap production of all coal-tar products in Germany and the cheap labor conditions there, together with the degradation of the German mark, the German manufacturers are now able to dump lampblack in this country at prices lower than the cost of production here, and large shipments of lampblack have already been made to this country by German manufacturers, shipping through Holland. Other European countries are also capable of producing lampblack at much lower costs than are possible in America, at least until such time as the coal-tar industry has been built up to greater proportions and more stable conditions than now prevail.

If ocean freights should become lower, which seems certain, this German black can be landed in this country at even lower prices than now, and their present prices delivered New York, containers included, are at least 40 per cent under the lowest prices that can be made here. In order to equalize the cost and give lampblack manufacturers in the United States reasonable protection against this importation, a duty of 60 per cent upon their net price will accordingly be necessary.

Lampblack is used in many different industries in this country, but principally in the manufacture of rubber goods, paints, and printing ink. It is perhaps the strongest of all pigments, having very great coloring power, and the amount that is used in any of these compounds consequently forms a very small percentage of the latter. This coloring strength is so great and the price of lampblack is so low, 16 to 18 cents per pound, for ordinary grades that it constitutes but an infinitesimal percentage of the cost of any compound in which it is used, and therefore the duty asked for will make no difference whatever in the cost of living.

In order to encourage the development of the coal-tar industry, it is necessary to have as large a market as possible for the products, of which creosote oil is the most important in volume next to pitch, which is the residue of distillation.

While lampblack is used in only very small quantities in any compound, it is an absolutely essential ingredient for the compounds mentioned, because none of these products can be made without the use of lampblack. Therefore the continued operation of the important industries in which lampblack is used depends upon a constant supply of this product, and its importance will be seen to be greatly out of proportion to its own cost and volume.

Lampblack is the only article in paragraph 53, Schedule A, that we produce, and we are interested in that item only, to which the foregoing arguments apply.

We respectfully submit, therefore, that it is desirable to increase the duty on lampblack to 60 per cent ad valorem, because of the conditions of production and competition above cited, and that this item be separated from the paragraph which includes the other black pigments of different origin and produced under different conditions.

SAMUEL CABOT (INC.),
MARCH G. BENNETT, *Treasurer*.

OCHERS, UMBERS, AND SIENNAS.

[Paragraph 55.]

BRIEF OF PAINT AND DRY COLOR MANUFACTURERS, SUBMITTED BY REICHARD-COULSTON (INC.), NEW YORK CITY.

NEW YORK, *January 4, 1921.*

SIR: In reference to tariff revision, Schedule A, "Chemicals, oils, and paints," we present to you for the hearing the attached brief concerning paragraph 55.

In consideration of items mentioned above, classified under this paragraph, we recommend that the Payne tariff of 1909 be considered as the maximum duty.

Reasons.—There are no American deposits of earth that equal the imported qualities and these imported qualities are essential to the continous development of the American paint trade. Domestic qualities can not be substituted.

No American manufacturers need protection, as their qualities are of an entirely different nature, used for different purposes and do not compete with the imported.

In proof, we offer attached letters from American paint manufacturers and, if necessary, we could obtain similar letters from every paint manufacturer in this country.

Suggestions.—We ask that a much lower duty be placed on imported crude umbers and siennas than on imported powdered umbers and siennas, so that we can afford to powder them in this Country and employ American workmen, because under the Tariff of 1913 crude and powdered carried the same rate of duty, which would have made it impossible for us to continue powdering crude umbers and siennas at our factory in Long Island City, had it not been for the war, which stopped powdering in Europe.

W. I. COULSTON, *Secretary.*

CLEVELAND, OHIO, *December 28, 1920.*

It has been brought to our attention that there may be some revision in the tariff with a view to placing a duty on ochers, umbers, and siennas which are being imported from abroad. Such revision would work a hardship on consumers like ourselves and ultimately cause the users of the finished product in which these earth colors are incorporated, to pay higher prices.

Our reason for directing this to your attention is due to the fact that we have been purchasing practically our entire supply from you and you will no doubt want to impress upon the Tariff Committee, the fact that within our knowledge, there are no ochers, umbers, and siennas obtainable in this country of a quality which can be used satisfactorily as substitutes for the imported grades. The tint, strength and texture are not the same, and in order to produce finished products of the proper shades and quality, as demanded by the consuming trade, it is absolutely necessary for us to use imported materials.

Should we be compelled to use domestic materials, due to any high rate of tariff or duty that may be assessed against these earth colors, the quality of the finished product would be considerably inferior to what we can produce with the use of imported materials.

It would be our suggestion that you request the Committee of Ways and Means not to disturb the present tariff arrangements on these ochers, umbers, and siennas.

THE SHERWIN-WILLIAMS CO.
C. G. BULL.

BOSTON, *December 27, 1920.*

We are glad to give you our opinion in regard to proposed tariff on imported dry colors, and we are speaking as distributors of paints and colors in this country rather than as manufacturers, although the writer is a stockholder and director in the large manufacturing concern of Benjamin Moore & Co. with factories in the various cities of United States.

The writer has always been a low tariff man rather than high tariff, but has favored a protective tariff whenever it was possible to build up domestic manufacturers in the production of goods that could compete ultimately with those of foreign make; and his latt er policy has proved of advantage in developing many industries in our country which could not otherwise have been done.

In the matter of many imported colors, especially those which have not been manufactured but are distinctly earth products, we do not see how it is possible to produce anything in this country which can at all compare with those which are imported. Therefore, any amount of duty assessed on the latter would be simply a clear tax on consumers of paint in this country, and would not in any measure help the paint manufacturers.

We have never seen any domestic siennas, umbers, vandyke brown or ochers which could at all compare with those which are brought in from foreign countries, and we certainly think it would be a mistake to make any increase in the small duties now imposed. It is possible that the tariff on crude siennas and umbers might be abolished so that they could then be powdered here, and give employment to some of our workmen.

We do not know whether it is proposed to have an appreciable duty on English or French chalk—the basis of whiting—but, if such action is proposed, it would, in our opinion, be a mistake as there never has, in our opinion, been anything produced in this country that would at all equal the imported chalk.

If we could produce these goods in our country, we would not write so strongly in this respect; and, of course, we all realize that we may have to increase duties on some goods in order to add to our revenues which are so much needed. The total amount, however, on these articles should be very small and would work, in our opinion, more harm than the small amount realized if such duty were imposed.

The writer has been in the paint business in this country for more than fifty years, and all that time has never seen, as stated before, anything equal to the imported colors referred to, and with that experience he strongly hopes that nothing will be done to increase duties as suggested in some quarters.

GOULD & CUTLER CORPORATION.
GEORGE L. GOULD, *President.*

BOSTON MASS., *December 18, 1920.*

We understand that you are to appear before the Ways and Means Committee of Congress regarding the proposed changes on the tariff for dry colors.

In this connection, permit us to say that any increase in the cost of some of these colors, mentioned below, must be directly paid by the consumer, inasmuch as we are unable to substitute the domestic colors for certain imported colors. In particular, we will mention imported French ochre, Italian siennas, Turkey umbers.

These colors are of a different quality from those produced in this country and our trade calls for these qualities definitely in a large number of cases.

HOWE & FRENCH.
W. H. DOE.

PHILADELPHIA, *December 21, 1920.*

We have just received a letter from Messrs. Dowdy Bros. in reference to the question of the revised tariff on imported earth pigments. While we have in this country ochres, siennas, and umbers, none of them have the same peculiar tone as shown in the imported articles. It is due to this peculiar tone that the imported articles are used so largely by the paint industries.

The American mines up to the present time have not produced, excepting in a very few isolated cases, anything in the way of siennas that would at all compare with the imported articles. So far as the other umber deposits are concerned, we have never found anything comparing with it.

In the question of the ochres, French ochres are as a rule in a class so vastly different from anything we have in this country, that it is of great importance we should be able to secure them for the use of the industry. We are strongly in favor of tariffs for the protection of American industries but there the importation of foreign material does not interfere with an American industry, we believe a low tariff should be imposed or in some cases no import duty charged.

SAMUEL H. FRENCH & CO.,
EDWARD T. LONGSTRETH.

ST. LOUIS, *December 18, 1920.*

It has come to our attention that with the change in Washington, a movement is being put forward to increase the tariff on importations.

If you can in any way aid to the extent of preventing an increase in such as pertains to Turkey umbers, Italian siennas, and French ochres, we believe the paint manufacturers as a whole will be benefited and through them the general public.

The above colors are not such as come in active competition with the American products as they are distinctively different and the one can not take the place of the other.

H. C. SCOTT, *Secretary.*

ST. LOUIS, MO., *December 20, 1920.*

In reply to yours of December 18, requesting our opinion as to the advisability of an import duty on French washed ochres, Italian siennas and Turkey umbers, we believe such a duty would be not only unnecessary but would work considerble hardship on paint manufacturers and consumers.

While there are manufactured domestic products made in imitation of the above-mentioned imported products, they are purely imitations and are of inferior quality. Owing to this inferiority they could not and would not be substituted for the imported materials even though the difference in price were much greater than it is at the present time. In fact, the domestic materials are so inferior that they can not be used satisfactorily for the manufacture of paints.

It might also be well to add that it is our opinion that this inferiority of the domestic materials could not be remedied were they permitted by a policy of protection to receive a higher price for their products, as the inferiority is not due to process but to the fact that the quality of the deposits of the raw materials are of poor quality.

To sum up it is our opinion that an import duty laid on imported French washed ochres, Italian siennas, and Turkey umbers would only compel the paint grinders to pay more for their imported colors without a corresponding advantage to the American producers of similar products.

J. B. KNIGHT, *Purchasing Agent.*

ST. LOUIS, MO., *December 18, 1920.*

Replying to your favor of December 17, we note what you say in reference to the contemplated revision of the United States customs tariff. Same will include French ochers, Italian siennas, and Turkey umbers.

In this connection wish to say that the above items do not in any way conflict with the domestic colors, in fact they are used entirely for different purposes than the colors obtained from domestic sources. The grinders have for many years tried to substitute domestic ochers, siennas, and umbers for their requirements, and after their many experiments found that same are practically unsuitable and can not be compared in any way with the imported colors. For that reason think that it would be injustice to the paint industry to include these colors in the revision of customs tariff, for the reason that same do not in any way conflict with the domestic colors in question.

No doubt you will find similar expressions from other grinders on this subject.

Hoping that you will succeed in convincing the Committee on Ways and Means of the fact as stated above, and with kindest regards, we are,

EBERSON-LINDSLEY PAINT CO.,
Per E. EBERSON, *Superintendent.*

ST. LOUIS, MO., *December 22, 1920.*

Our attention has been called to the fact that there is a possibility of some advance in United States customs tariff on French ocher, Italian sienna, and Turkey umber.

We would like to place ourselves on record as opposed to an advance in tariff on these three important commodities in the painting industry. French ocher and imported sienna and umber are used for entirely different purposes from the American ochers and umbers and seldom, if ever, compete with each other.

The domestic ochers and umbers can not be substituted effectively for the imported, and no advantage would be gained by placing a higher or prohibitive tariff against these articles.

We believe when this matter is explained to the proper committee of Congress, having this matter under consideration, they will see that they will not be helping in any way the domestic color manufacturers, but simply forcing paint grinders to pay a higher price for their umbers, siennas, and others, which are not competing with the American product.

ST. LOUIS SURFACER & PAINT CO.,
H. CAVIS, *President.*

WATERTOWN, MASS., *December 22, 1920.*

It has been brought to our attention that there is considerable agitation over the present tariff rates with the probability that the new administration will take steps to revise them in the shape of placing a high protective tariff on imported products.

There are certain items which enter largely into our manufacture on which a high protective tariff would not only seem unjustified but would place us as well as all paint manufacturers in a rather embarrassing position. We refer particularly to French ochres, Italian siennas, Turkey umbers, Spanish oxides, and Vandyke browns. These colors enter very largely into our process of manufacture and up to the present

time no American substitute has been discovered which will anywhere near take their place. Even in the stress of war times we were not able to get products of American manufacturers which could in any way substitute for the imported article. It seems to us, inasmuch as you are importers of these colors, it is up to you people to place the facts in the case before the proper authorities in Washington that they may exactly understand the true circumstances.

We feel sure that we voice the sentiments of the paint grinders in general in what we have just said and we would certainly appreciate any action which you see fit to take in it. We assure you of our hearty cooperation if we can be of any assistance to you along these lines.

We beg to remain,

WATERPROOF PAINT & VARNISH CO.
Per P. J. ROBERTS.

BOSTON, *December 22, 1920.*

We have heard, in fact, of course, have noticed from the newspapers that there is an intended upward revision of the United States customs tariff, which we agree is in order on such items as are produced in this country, but on certain items that are not produced in this country we believe that a duty should not be assessed.

We refer to such raw materials as required in our line as French ochre, Italian umbers and siennas. No material of this kind, or an equivalent to these goods, is produced in this country, and I think it would be detrimental to our business to have a duty assessed on those particular items.

BOSTON VARNISH CO.,
H. A. HALL, *Treasurer.*

BOSTON, MASS., *December 27, 1920.*

Answering yours of December 20, in which we note a contemplated revision of the tariff covering dry earth materials, such as umbers, siennas, and French ochers. We trust that the framers of the tariff will recall the fact that there does not appear to be products made in this country of an equal standard as the above mentioned, and trust, therefore, that they will not burden us with a prohibitive tariff upon these articles. While we are heartily in accord with a protective tariff, we believe that a high tariff on these articles would prove a detriment and trust that your efforts will prove successful in this direction.

WADSWORTH, HOWLAND & CO. (INC.),
CHAS. S. ROBBINS, *Vice President.*

LOUISVILLE, KY., *December 21, 1920.*

We understand that the present Congress will very likely revise the customs tariff, with all indications that a higher tariff will be assessed on French ochers, Italian siennas, and Turkey umbers.

Inasmuch as these imported earth colors are entirely different from the American or domestic colors and can not be used for the same purpose, there would be a distinct disadvantage to the American industries to have the tariff raised on these commodities.

The American colors are all right for some purposes, but they can not be used as substitutes for the imported earth colors, and we therefore suggest that you do all in your power to make this matter clear to the Tariff Committee working on this proposition, so as to avoid any unjust raising of the tariff on these three earth colors.

Assuring you of our hearty cooperation in any steps you may take, we are,

LOUISVILLE LEAD & COLOR CO.,
By OTTO F. FANSEL,
General Superintendent.

LOUISVILLE, KY., *December 20, 1920.*

Inasmuch as it is impossible to use American umbers, siennas, and ocher except in a very limited way to replace the imported, we urge that you bring all possible pressure to bear on Congress to protect the trade in bringing these goods into the United States. To us this seems a very important matter if the paint industry of this country is to survive.

J. F. KURFEES PAINT CO.

LOS ANGELES, CALIF., *December 22, 1920.*

We write you in reference to the rumors regarding increased tariff which is now under discussion.

We understand that this tariff would affect imported umbers, siennas, and ochers, and we hope that you will be able to bring influence to bear to prevent any such move.

Permit us to say that these imported colors do not compete with the American-made products, and if this new tariff were put into effect it would have a tendency to raise the price on many items and would be of no material benefit to the American-made colors.

Again hoping you will be able to have some influence in the matter, and with the season's greetings, we are,

MATHEWS PAINT CO.,
W. P. KENNEDY, *Purchasing Agent.*

ST. LOUIS, *December 20, 1920.*

We have been advised by your representatives, Thompson-Munro-Robins, that the present Congress are revising the United States customs tariff.

Imported colors and pigments, such as French washed ochres, Italian siennas and Turkey umbers are essential to the success of our business.

While it is true that in inexpensive paints, or paints that are made where quality is not considered, the American goods can be used with some satisfaction, yet, in making quality materials, we have found it necessary to use the imported article and we can not substitute with American-made colors.

We will ask that you do all that you can to prevail on Congress to not put tariff on the articles mentioned, as the manufacturers of good paints will be handicapped to a great extent.

SEALWOOD CO.
M. F. GESENCH.

ST. LOUIS, MO., *December 17, 1920.*

We understand that there is a proposition up before Congress whereby they are about to enact a legislation to protect the interests of domestic color manufacturers against European imports.

We are very sorry to hear that there is such a proposition in the minds of Congress, and feel it will prove a detriment to the paint manufacturers in general were such a legislation to be enacted—for the reason that domestic colors can in no respect replace the imported colors for certain purposes, and it would also work an imposition on the paint manufacturers to the effect that the local color manufacturers would after a time take advantage of this law protecting them and furnish the paint trade with inferior brands or qualities, making the use of the better grade or imported colors prohibitive.

We respectfully request that if you have an opportunity to place this before the committee that you do so, and use this letter as you see fit.

STEELCOTE MANUFACTURING CO.
GEO. E. NIEBLT, *President.*

CINCINNATI, *December 20, 1920.*

In response to request of the 18th instant from your local agents, Durbin & Durbin, that we quote you our views with reference to the use of French wash ochres, Italian siennas, and Turkey umbers as compared with the same materials of domestic manufacture.

We are frank in stating that there is such a vast and wide difference in results obtained by the use of these imported products as against the domestic there is really no comparison between the two as raw materials, and, as a matter of fact, in a great many instances it is impossible to use the American product, although it is our general policy to do so when and wherever possible.

We have always bought, and will continue to buy, imported earth colors, regardless of tariff regulations; so that, in our opinion, the American industry would not be benefited by the establishment of tariff thereon, other than for revenue purposes.

Yours, respectfully,

THE AULT & WIBORG CO., VARNISH WORKS,
Per W. B. MARTIN.

BOSTON, MASS., *December 22, 1920.*

For a number of years we have been using imported siennas, umbers, and yellow ochres, and have never been able to obtain domestic goods which would in any way equal the imported materials.

ASAHEL WHEELER CO
By G. J. BURNS.

PROVIDENCE, R. I., *December 28, 1920.*

We learn of the proposed changes in the customs tariff, and that the Ways and Means Committee of Congress are considering a levy on imported earth colors, ochres, umbers, siennas, Vandyke browns, whiting, etc.

During the war we did our best to use native American earths under these same names, but found it absolutely impossible to displace the foreign materials with them.

There is no dearth of colors bearing the above names native largely to Pennsylvania but none of them can be used by us to get the same tones. They are in no sense competitive on this account. The native earths would be used where the color permits, tariff or no tariff, but the foreign goods must be imported for the qualities that they possess which are entirely different from those native to this country.

We paid during the war as high as 6 cents a pound for French ochre which we used to buy at 2 cents a pound, and it was because we could not use the American ochre so called, though it was offered us freely and at very much cheaper prices.

U. S. GUTTA PERCHA PAINT CO.,
HERBERT W. RICE, *President.*

ST. LOUIS, MO., *December 23, 1920.*

Permit us to aid with such influence as we may have in your efforts to have the present Congress refrain from putting a tariff on French washed ochres, Italian siennas and Turkey umbers except as a source of revenue, as we are convinced that the imported colors do not to any extent interfere with the production and sale of American materials of a like nature.

We are users of the imported colors above referred to, and we wish to advise that the imported article fills a place that the domestic colors have been up to this time unable to fill, and we therefore believe that it would be a mistake now to place this embargo on imported colors, and offer this as our protest, hoping same may be of some assistance to you.

Thanking you for calling our attention, and assuring you we will do anything further within our power in the above matter, whenever in your opinion same can be done, we beg to remain,

ROWER-BEINE PAINT MFG. CO.
Per HENRY ROWER.

BOSTON, *December 20, 1920.*

We wish to join in the protest against advancing tariff on imported ochre, sienna umbers, Vandyke brown, red oxide, etc., as our experience during the war period when we were obliged to try products of that nature proved to us that foreign goods of that nature referred to above can not be produced in this country. Therefore, the American goods do not need protection. Our experience for a number of years has proved to us that the imported articles are far superior to anything in this country.

JAS. H. PRINCE PAINT CO.
CHAS. H. SEAWARD, *Treasurer.*

CINCINNATI, OHIO, *December 20, 1920.*

We understand the tariff is to be revised. Would suggest that the raw materials, French washed ochres from France, and the Italian dry umbers and sienna browns be not taxed as they in no way interfere with nor enter into competition with American products.

WILSON PAINT & GLASS CO.

LOUISVILLE, KY., *December 20, 1920.*

Replying to your letter as to our views on imposing a tariff on French ochre, Italian siennas, and Turkey umbers, we do not believe this should be done, and feel quite confident it will not be done, when our lawmakers understand the situation with regard to these articles.

There are no equivalents of French ochre, Italian siennas, and Turkey umbers, produced in this country.

The only reason for imposing a tariff on them at all would be for the purpose of revenue, as there is no production of these articles in this country to be protected.

PEASLEE-GAULBERT CO.
L. R. ATWOOD, *President.*

BRIEF OF UNITED PAINT MANUFACTURERS, SAN FRANCISCO, CALIF.

DECEMBER 23, 1920.

We, the undersigned, do hereby earnestly enter protest against that part of the proposed revision of the United States customs tariff applying against the importation of French washed ochres, Italian siennas, and Turkey umbers, inasmuch as these colors are indispensable for paint-grinding purposes and do not interfere to the slightest degree with the sale of American colors of this nature, which have not the tone of the imported and are comparatively valueless for grinding into mixed paints, etc.

American umbers, siennas, and ochres can not be substituted for the imported ones for our purposes, and we earnestly request careful consideration of our protest against a higher tariff by the Committee of Ways and Means, the passage of which would seriously handicap the paint-manufacturing trade and more seriously handicap the extensive building program outlined for the coming few years in the way of necessarily effecting a higher cost of production which would have to ultimately be taken care of by the consumer.

High prices will not be looked upon favorably by the builder and to encourage rather than discourage activity in this line, we hereby request the representative of the Reichard-Coulston Co., of New York, to appear before the committee of Ways and Means to voice our opinions as to the danger attached to the passage of the measure in mention.

BASS-HUETER PAINT CO.,
By H. F. JAMES, *Vice President.*
W. P. FULLER & CO.,
By F. W. FULLER.
R. N. NASON CO.,
By R. H. NASON, *President.*
THE PARAFFINE COMPANIES (INC.),
By R. S. SHAMWALD, *Vice President.*
YATES & CO. (INC.),
By C. M. YATES, JR., *Treasurer.*

COLORS AND PIGMENTS.

[Paragraphs 51, 52, 54, 59, 63, 64, and 67.]

ARTHUR S. SOMERS, OF THE FIRM OF FRED L. LAVANBURG & CO. NEW YORK CITY.

Mr. SOMERS. Mr. Chairman, I appear to-day representing the color manufacturers of the United States, of whom there are about 40 listed, and it was my purpose to discuss the particular matters in which they are interested, covered by certain paragraphs of the present tariff law, but the discussion has taken such a trend that I hesitate to go into an academic discussion, for the reason that if there is any force behind the propositions already advanced, it applies with equal force to our industry, and it would simply be encumbering the record to repeat what has been said. And then again I anticipate and gather from the inquiries made by the committee the kind of information you are seeking, and although I have prepared for you a brief, in looking it over I find that it is not quite specific enough, and

it does not go to the heart of the question as you gentlemen would like, and I think, in deference to the importance of this discussion and the great interest that is involved, that I ought to give you, if it be possible, all the information that you ought to have, and while I am not able to supply such data as this discussion has revealed as being necessary, I think we ought to do the best we can.

For example, you want to know how important this industry is. I am not prepared to say that to-day, for the reason that the firms that I represent here are rather loath to discuss with or disclose to a competitor their real financial condition or the extent or volume of their business, or their costs, or their labor costs, or any of those things. However, that information is gratuitously given to the Tariff Commission. I recall that during the last few months a representative of that commission spent some time in my office, and I put at his disposal all of our books, so that he might get the kind of information that he was after, and what they have we do not know, but I am sure it is available and would be very illuminating to all of the members of the committee because, after all, that is what you want.

We are in the critical period where we are asking for protection, and we do not sometimes know upon what we are basing our claims, because there is no way of determining the relative costs between this country and foreign countries, particularly Germany. I only do know that on some articles that we are manufacturing and very importantly, and we have grown in the last few years in this country, Germany is now coming in, and I fear is using this country, or is going to use it, as a dumping ground. For example, I have here original letters from firms in Germany quoting prices that are below the cost of manufacture as reported to me by some of the large manufacturers in this country.

And there is a condition attached to some of these letters whereby it is clearly evident that there is a cartel, a price agreement, a trust arrangement over there. The price in many instances from the various houses is absolutely uniform, and they say that this is the lowest price that they are permitted to make for export, indicating clearly that they have an arrangement over there which is illegal in this country, and you can see that unless the American manufacturers are put on some fair basis with the foreigner we can not continue and enjoy the prosperous condition—I don't mean from a money-making standpoint, but from the standpoint of employing labor decently, that we have enjoyed in the last three years.

The CHAIRMAN. Are you going to put those letters in the record?

Mr. SOMERS. I am going to put the original letters in the record with my brief that I am going to ask the privilege of filing not later than next Monday, if that meet with the approval of the chairman.

The CHAIRMAN. That will be all right.

Mr. SOMERS. Let me, for the purpose of the discussion, call your attention to the paragraphs which I will discuss, so that it may be linked up with the record. The paragraphs are paragraph 56 and paragraph 59 and paragraph 63. Those are the principal paragraphs.

We are suggesting an amendment to paragraph 63; that is, that we change the phraseology in order to avoid some of the complications that have arisen during the past year with the Government, out of a

misinterpretation of the paragraph, and that has led to the necessity for some very close decisions, and it involves the question of coal-tar products, Mr. Chairman—and this appeals to Mr. Longworth particularly—as used in the manufacture of color lakes. That we propose to cover very carefully in our brief.

Nearly all of the articles that you have heard discussed here to-day interest us, because they enter into the manufacture of articles that I am pleading for.

Mr. HAWLEY. You said a moment ago, referring to these letters, that the prices quoted were the lowest they were allowed to quote for export?

Mr. SOMERS. Yes, sir.

Mr. HAWLEY. Witnesses who appeared before the committee in December stated that certain commodities, if purchased for use in Germany, would cost say $1,000, but if bought for export to the United States, for instance, the United States would have to pay $2,500—90 per cent of the difference going to Government in taxation and 10 per cent to the manufacturer as an extra profit. Have you found any indication of that practice in your industry?

Mr. SOMERS. We have not experienced that for the reason that we do not import anything from Germany, and we are not interested in buying things there at the present time, because we hope to confine our purchase of raw materials to America. We are interested to use the industries that have sprung up, represented by some of the gentlemen who have preceded me, and to patronize them, but we are simply asking, in conclusion, that we be considered in connection with the various raw materials, so called, that you will be called on to consider, and all of which are related to our industry, because there is not one of them that we do not use to a large extent in the manufacture of articles included in these three paragraphs, 56, 59, and 63, and I will also call attention to the manufacture of Paris green, which is made extensively in this country and which is now being brought here from Germany, and if you will permit, Mr. Chairman, I would like to file a brief not later than Monday.

The CHAIRMAN. All right, sir.

Mr. GREEN. If duty is laid on those products that enter into your materials, you need a compensation duty?

Mr. SOMERS. Yes. That is brought home clearly in the question of color lakes, for example. If you are going to protect the dye industry in this country—that is, where coal-tar products are used—if you do not protect the lake-color industry, Germany will send their lake colors here, and that would exclude us from manufacturing it. It will exclude us as customers of the dye industry here, and the only outlet that the dye industry will have for its product will be the textile trade, and you will drive a very important branch of the industry out of business, because we can not possibly compete with Germany in that fine lake-color business unless we are related to the tariff or the tax levied upon coal-tar products.

Mr. HULL. From your knowledge of business conditions do you believe that the level of wages will continue as it is?

Mr. SOMERS. I am very glad you asked that question. I hope it will continue as long as this country lasts. I hope that we will never see the disastrous and disgraceful conditions that existed a few years ago with respect to labor in the United States, when men were thought

to be well paid who earned $12 a week, and who are now earning $30 a week. I would not like to see that old condition revived.

Mr. HULL. For instance, should the cost of living go down 50 per cent during the next 18 months, you would not change the wages that are now paid labor?

Mr. SOMERS. I would not personally; no; because I don't believe they were ever sufficiently high.

Mr. HULL. You think the level should be maintained?

Mr. SOMERS. I think there should be a leveling process, and we have almost reached that with the laborer of to-day, and we ought to give him the benefit of his experience.

Mr. HULL. I asked you simply to get the benefit of your business experience.

Mr. SOMERS. I want to say without any reservation whatsoever that, as a manufacturer, I hope the American workingman will never be asked to work for the wages he received prior to the war.

Mr. HULL. I agree with you, sir.

Mr. COLLIER. The Payne-Aldrich Act puts 15 per cent on Paris green, and the act of 1913 made it free. What do you suggest?

Mr. SOMERS. Fifteen per cent would be ample. We have not had any imports because of the war, and then we do not anticipate very much competition, for the reason that the Government is very jealously watching all insecticides, and any insecticide brought from abroad would be submitted to the closest possible scrutiny, and if it does not meet the standards set up by the United States Government it is confiscated, and we do not think they will take the chance of going that far. I think there ought to be some tariff put on Paris green to justify our manufacturers here in investing the large sums of money in a very uncertain and dangerous business, because if there is not any demand for Paris green our loss might be tremendous.

Mr. COLLIER. Do you make the London purple also?

Mr. SOMERS. We do not make that; no, sir.

The CHAIRMAN. Mr. Somers, considering 15 per cent ad valorem on Paris green, what would be a fair specific rate to offset that 15 per cent?

Mr. SOMERS. Anywhere from 3 to 4 cents a pound.

The CHAIRMAN. Thank you, sir.

Mr. SOMERS. That would be ample. We would be quite satisfied with that.

BRIEF OF ARTHUR S. SOMERS, NEW YORK CITY, ON BEHALF OF DRY COLOR MANUFACTURERS OF THE UNITED STATES.

In presenting this brief we appear on behalf of probably 80 per cent in number and capital of the dry and pulp color manufacturers of the United States. We append herewith a list of those manufacturers who have authorized us to act in their behalf, marked "Exhibit A."

The aggregate capital employed by these manufacturers has increased in the year 1920 approximately 300 per cent over the amount of capital employed in 1913. This estimate is based upon such figures as we have been able to get, and does not include a report from all the firms we represent.

With respect to the number of employees engaged in the industry, it has been difficult to get definite information, but from our knowledge of about one-third of the firms engaged in the industry, the number of employees has more than doubled from 1913 to 1920.

Reports received from 16 firms indicate that the volume of business has increased 400 per cent between 1913 and 1920.

The total wages have increased about 900 per cent. In 1913 the average wage paid was $12 per week. The average wage paid to-day is approximately $30 per week. This refers to unskilled labor solely.

Practically all the articles in which we are interested (with one or two exceptions) are included in paragraphs 52, 54, 59, and 63 of the act of October 3, 1913, and in Title V, section 501 of the act of September 8, 1916.

We are making a request for an increase in the present rates for reasons that we deem conclusive, and at the same time we ask that the articles enumerated in the paragraphs above referred to be considered with the raw materials enumerated in Exhibit C, attached herewith. If there is an advance in the tariff on such raw materials, we respectfully request a corresponding increase over and above the protective duties now asked for below. It is inevitable that any advance in the tariff on raw materials, unless accompanied by a corresponding increase on articles manufactured from such materials, will result in the discriminatory advantage enjoyed by foreign competitors, particularly German and English manufacturers. (See Exhibit C for list of raw materials.)

Furthermore, the duties asked are based upon present rates of exchange in Germany and England. We respectfully ask for an adjustment of the difference in exchange so that ad valorem duties may be figured on a more normal basis than at present exists.

The particular colors or pigments in which we are interested are the following:

BLUES.

Paragraph 52 provides: "Blues, such as Berlin, Prussian, Chinese, and all others containing ferrocyanide of iron, in pulp, dry or ground in or mixed with oil or water, 20 per cent ad valorem."

We are manufacturers of the colors above enumerated. The present duty of 20 per cent ad valorem offers no protection whatsoever, and the situation is very serious. We append herewith original letters, marked "Exhibit D," all received from German manufacturers, from which you will note that they offer the blues above enumerated in the American market at a price of M. 65.6 per kilo, which at the current rate of exchange, paying freight and duty, would bring the price to 45½ cents per pound. Taking into consideration the present cost of materials in the United States—that is to say, the prices at which contracts are now being made—these blues would cost, for raw materials, approximately what the German blue can be laid down for, freight and duty paid. Adding the cost of labor, which is approximately 12 cents per pound, it will be seen at once that the American manufacturer would be obliged to sell goods at a very heavy loss in competition with the German-made goods unless consideration is given by your honorable committee to the difference between the cost of production here and abroad.

From information that we have received, unskilled labor in Germany is being paid at the rate of 60 to 70 cents per day, whereas the same class of labor in America is receiving not less than $5 per day. Even though a duty were levied that would take into consideration the difference between the cost of labor here and abroad, it would not enable the American manufacturer to compete, for the reason that some consideration should be given to administrative and selling expenses, all of which have nothing to do with profits. It must be rembered that the foreign manufacturer has a home market, where doubtless the volume of his output is disposed of, and the profit on this is sufficient to cover overhead, distribution, and administartive costs, and the American market can then be used as a dumping ground, if they can get the cost of the raw material and labor out of their goods, with no regard whatsoever of the added costs above referred to. That this is true can be substantiated by past experience.

When the act of October 3, 1913, was approved, German manufacturers offered and shipped into this country, in direct competition with American manufacturers, large quantities of blues. At that time it cost us to manufacture these blues an average of 23½ cents per pound. By cost of manufacture, we mean "factory cost only," without any allowance for selling expense, salesmen's commissions, office management, and general overhead. These German makers of blues offered a product equal to the American makes at a price of 25 cents, duty paid, thus leaving the American makers in order to compete a margin of just about 6 per cent gross profit, from which they would have to deduct general expense, taxes, overhead, salesmen's commissions (which average 5 per cent alone), traveling expense, cash discounts, and incidentals.

The result was that it became absolutely impossible for the American manufacturers to compete, and the blue industry of this country would have been ruined except for the fact that the war broke out July 30, 1914, and practically stopped the farther

importation of these German blues. Judging by past experience, we have every reason to anticipate a recurrence of the conditions described above.

The chief raw material used in making blue is prussiate of potash or prussiate of soda. Both articles have always been considerably lower in the foreign market than here, but to-day it is practically impossible to obtain quotations on any quantity of such raw materials from Germany. The fact is that to all inquiries the answer comes back "We have none to offer." We believe, therefore, that your committee will grant us relief by putting a duty on the blues described in paragraph 52, which, while it will not be prohibitive, will enable the American manufacturer to enter our own market on a competitive basis. We ask for an ad valorem duty of 30 per cent plus 10 cents per pound specific, instead of the present duty of 20 per cent ad valorem. We would also call attention to the fact that every one of the German manufacturers name the same price, and one goes so far as to say that the price quoted "is the minimum price for export." It is quite evident that a price agreement among the German manufacturers is in force.

CHROME YELLOW, CHROME GREEN, ETC.

Paragraph 54 provides as follows: "Chrome yellow, chrome green, and all other chromium colors in the manufacture of which lead and bichromate of potash or soda are used, in pulp, dry, or ground in or mixed with oil or water, 20 per cent ad valorem."

Here we are very unjustly treated. The chief raw material used in making chrome yellows and chrome green is either white lead or litharge. Here we are discriminated against because the duty on white lead and litharge is 25 per cent. The finished chrome yellow is allowed but 20 per cent, and therefore instead of being protected we are discriminated against at least 5 per cent on our chief raw material. On chrome greens the situation is just as bad, because chrome greens are made from a mixture of chrome yellow and prussian blue, and therefore the discrimination is evident. Based upon the present duties on the raw materials we use, we feel that we should receive a duty of at least 40 per cent plus 5 per cent per pound specific on chrome yellows and chrome greens, dry or in pulp.

VERMILION REDS.

Paragraph 59 provides: "Vermilion reds, containing quicksilver, dry or ground in oil or water, 15 per cent ad valorem; when not containing quicksilver but made of lead or containing lead, 25 per cent ad valorem."

The present duty on quicksilver vermilion is absolutely inadequate. The article is composed almost entirely of quicksilver, which latter article bears a present duty of 10 per cent. Should there be an increase in the duty on quicksilver, we respectfully ask for a corresponding increase in the duty on quicksilver vermilion. We claim that vermilion containing quicksilver should be made dutiable at a rate sufficient to justify the difference in labor costs, in addition to equalizing the duty on quicksilver. We urge for quicksilver vermilion a duty of not less than 10 cents per pound specific to cover the difference in labor costs, and an additional ad valorem duty to correspond to whatever duty is put on quicksilver.

COLOR LAKES, ETC.

Paragraph 63 provides: "* * * All color lakes, whether dry or in pulp, not specifically provided for in this section, 20 per cent ad valorem."

This may have been superseded by section 501, "Color acids, color base, color lakes, leuco acids, etc." In connection with this we wish to submit a copy of a brief submitted to the Tariff Commission on January 31, 1919, marked "Exhibit B," which shows an injustice to the makers of color lakes not receiving any protection whatever over and above their raw material and suggesting a change in same.

Furthermore, the matter has been in dispute as to whether color lakes should be classified under the act of September 8, 1916, or under paragraph 63 of the act of October 3, 1913. Under the act of September 8, 1916, we receive a protection of 30 per cent and 5 cents per pound specific. Under the act of October 3, 1913, we receive a protection of 30 per cent ad valorem. In order to avoid any controversy we suggest that the wording of paragraph 63 might be changed to read as follows: "Color lakes and all other pigments, whether dry or in pulp, made in whole or in part from coal-tar dyes, leuco acids, leuco bases, or any other coal-tar derivatives, 45 per cent ad valorem plus 10 cents per pound specific."

Or for the reasons, however, stated in our brief submitted to the Tariff Commission under date of January 31, 1919, copy of which we submit herewith as Exhibit B, we claim that the pigments made from color acids or color bases or other coal-tar deriva-

tives shall receive an added protection, because they are one step further in the manufacture beyond the class in which they are now grouped, and that there should be a new group added to section 501, to be known as Group IV, which should read as follows: "All pigments, dry or in pulp, made in whole or in part from coal-tar dyes, leuco acids, leuco bases, or any other coal-tar derivatives, 45 per cent ad valorem and 10 cents per pound specific."

If, however, the duties in the act of September 8, 1916, of Group III, section 501, are changed to higher duties, we respectfully request a corresponding advance over and above the duty asked for above, for reasons stated in our letter to the Tariff Commission under date of January 31, 1919, marked "Exhibit B."

We also request that the general clause covering "Pigments, dry or in pulp, not specifically provided for," in paragraph 63, be modified to read as follows: "All other specifically provided for," in paragraph 63, be modified o read as follows: "All ota pigments, dry or in pulp, not specially provided for, 30 per cent ad valorem plus 10 cents per pound specific."

PARIS GREEN.

Paris green is on the free list, which certainly is a great discrimination against the American Paris-green manufacturers who have to make up a stock to anticipate a demand which may or may not come, depending upon the degree of activity of leaf-eating insects in season. It is therefore a speculative business at best, and unless the American Paris-green manufacturer receives some protection he can not be expected to have insecticides on hand ready for emergency. As a matter of fact, Paris green has already been offered largely by German importers for next year at a price practically equal to our cost of manufacture, and if this foreign Paris green does not arrive in time for the farmer and American Paris green is not ready for emergency, the potato and other crops of the United States are in danger of ruin. Surely the American Paris-green manufacturer can hardly be prepared to meet such emergency unless he receives some protection on his product. We respectfully ask for a duty of at least 20 per cent ad valorem, or 5 cents per pound specific.

EXHIBIT A.

List of dry and pulp color and Paris green manufacturers represented by the dry color tariff committee who join in petitioning for the duties asked for in said brief:

A. B. Ansbacher & Co., New York City.
Sherwin-Williams Co., Cleveland, Ohio.
Fred L. Lavanburg Co., New York City.
Pfeiffer Color Co., New York City.
Devoe & Raynolds Co., New York City.
H. Kohnstamm & Co., New York City.
G. Siegle Co., Rosebank, Staten Island, N. Y.
Western Dry Color Co., Chicago, Ill.
Devoe & Raynolds Co., Chicago, Ill.
Paul Uhlich & Co., New York City.
E. I. DuPont de Nemours Co., Newark, N. J.
J. S. & W. R. Eakins Co., Brooklyn, N. Y.
Siemon & Elting Co., New York City.
C. M. Childs & Co., New York City.
Hampden Paint & Color Co., Springfield, Mass.
Max Marx Color Co., Newark, N. J.
Morris Herrmann & Co., Newark, N. J.
Acme Color Works, Detroit, Mich.
Alston-Lucas Co., Chicago, Ill.
A. Wilhelm Co. (Glidden), Reading, Pa.
United Color & Pigment Co., Newark, N. J.
Imperial Color Co., Glens Falls, N. Y.
Mangano Color Works, Rahway, N. J.
F. S. Lasher & Co., Brooklyn, N. Y.
Harmon Color Co., College Point, Long Island, N. Y.
Kentucky Color & Chemical Co., Louisville, Ky.
Utility Color Co., Newark, N. J.
Fine Colors Co., Paterson, N. J.
Brooklyn Color Works, Brooklyn, N. Y.
Chrome Color Works, Matewan, N. J.
National Gum & Mica Co., New York City.

Paris green manufacturers:

Sherwin-Williams Co., Chicago, Ill.
Devoe & Raynolds Co., Chicago, Ill.
Glidden Co., Cleveland, Ohio.
A. B. Ansbacher & Co., New York City.
Fred L. Lavanburg Co., New York City.
Pfeiffer Color Co., New York City.
Devoe & Raynolds Co., New York City.
James Blanchard, Brooklyn, N. Y.
Bristol, Myers Co., Elizabeth, N. J.
Nitrate Agencies, Bayonne, N. J.
Detroit White Lead, Detroit, Mich.

EXHIBIT B.

Prof. F. W. TAUSSIG,
Chairman United States Tariff Committee.

DEAR SIR: We received a communication from you recently asking us for our comments upon your report to Congress on "Dyes and other coal-tar chemicals, 1918."

We wish to present our views as same affects our line of industry in proposed "bill to amend an act to increase the revenue, and for other purposes, approved September 8, 1916." We are giving you our criticism upon this act from the standpoint of being large manufacturers of lake colors. However, in making any criticisms upon said bill we do not wish to be considered as approving in any way the original act approved September 8, 1916.

We assume it is your desire to have the amended bill do full justice to all lines of industry in which dyes and intermediates are chief raw material, and therefore do justice to a large industry, namely, the manufacture of lake colors from dyes and intermediates.

A perusal of the act shows that lake colors are classified in Group III as color lakes. They are distinctly classified with colors; dyes for stains, whether soluble or not in water; color acids, color bases, leuco acids, or leuco bases, whether colorless or not, etc. All of Group III under section 500 are subject to a duty of 20 per cent ad valorem. Section 501 provides a further duty of 5 cents per pound on the same products. It provides, furthermore, that said duty of 5 cents per pound shall be based on standard of strength, which shall be established by the Secretary of the Treasury, and on all importations of such articles that exceed such standards of strength a said duty of 5 cents per pound shall be charged on the weight that said article would have diluted to standard strength.

Our objection to the act approved September 8, 1916, is based on the following fact: The manufacturer of color lakes receives a protection of 30 per cent plus 5 cents per pound. The cost of manufacture of color lakes, exclusive of labor and overheads, is probably 90 per cent thereof, derived from purchase of the same ingredients as contained in section 500, Group III, which are also given a protection of 30 per cent and 5 cents per pound. In other words, we have to buy our raw material from American manufacturers of Group III items, on all of which said manufacturers receive a protection of 30 per cent plus 5 cents per pound. We in turn have to sell the products derived from said raw materials with no greater protection against foreign color lakes than what our raw materials have received. Therefore, we will have to buy our raw materials, which are highly protected under this act, and sell the finished product without any added duty whatever to protect us for the difference in cost of labor, overhead, and other manufacturing expenses between the United States and foreign countries.

What both the present and proposed acts practically do is to give high protection to all manufacturers of raw materials and to give us no added protection whatever on the finished product. To show you how this will wreck an important industry we take, for example, one item, namely, a high-grade geranium lake, generally known as Jacqueminot lake. This is made from a precipitation of eosine dye with acetate of lead. The cost of the eosine is probably 99 per cent, and the acetate of lead 1 per cent in value. The manufacturer of this geranium lake will have to buy his raw material subject to a protection practically of 30 per cent ad valorem and 5 cents per pound and will have to sell the finished product in competition with imported geranium lakes, which will have to pay exactly the same rates of duty as our raw material. The manufacturer, therefore, gets no protection on the factory labor, office organization, salaries, increased cost of doing business, and other factors which are considered necessary to protect United States against foreign competition.

We could give numerous other instances of the same character, but thought it best to give one typical example.

Now, as to the clause in section 501 to the effect that the Secretary of the Treasury shall set a standard of strength and that on any importation of articles that exceed such standard of strength a special duty of 5 cents per pound shall be paid as if it were diluted to standard of strength, the same situation with regards to the raw material here applies to the finished product. If the standard of strength set is a high one, it would inure to the benefit of the color maker, but at the same time would put a tremendous duty on the eosine base, which is the color lake maker's raw material. If, on the other hand, the standard set is a low one, this, of course, would give less protection to the maker of eosine base, but at the same time would give exactly the same protection to the finished lake color. In other words, automatically, if a high standard were adopted for the color base, it would make the protection exactly the same as given to the maker of the raw material. You will readily see, therefore, that this

protection clause is of absolutely no benefit to the manufacturer of lake colors, because he is put in exactly the same class as the manufacturer of his raw materials.

We want to state in conclusion that we have given you one typical instance and we can give you dozens of the same character if desired. If you would like to hear from us as to what we believe would remedy the situation, we will be very glad to give you our views any time that you request us to do so.

Proposed change: We ask that there be a new group added to the act of September 8, 1916, to read as follows: "Group IV, section 501.—Color lakes and all other pigments, whether dry or in pulp, made in whole or in part from coal-tar dyes, leuco acids, leuco bases, or any other coal-tar derivatives, 45 per cent ad valorem plus 10 cents per pound specific."

EXHIBIT C.

Present duties on the principal raw materials used by the dry and pulp color manufacturers:

Paragraph 51. Barytes, etc., unmanufactured, 15 per cent ad valorem; barytes, etc., manufactured, 20 per cent ad valorem; blanc fixe, etc., 20 per cent ad valorem.

Paragraph 56. Litharge, orange mineral, red lead, and all pigments containing lead dry or in pulp, not specially provided for, 25 per cent ad valorem.

Paragraph 56. Orange mineral, 25 per cent ad valorem.

Paragraph 64. Bichromate of potash, 1 cent per pound.

Paragraph 67. Chlorate of soda, ½ cent per pound.

Paragraph 67. Bichromate of soda, ¾ cent per pound; hydrate of alumina, 15 per cent ad valorem; chloride of barium, ¼ cent per pound.

Paragraph 67. Prussiate of soda, ¾ cents per pound; prussiate of potash, 1½ cents per pound; sulphate of barium, 20 per cent ad valorem; quicksilver, 10 per cent ad valorem; lead, pig, 25 per cent ad valorem.

EXHIBIT D.

You will notice that these foreign letters are from five representative manufacturers of ferrocyanide blues, and they all have a uniform price of marks 6,580 for the blue in lump, with an additional cost of marks 60 for the blue in powder form, which is the form in which it is invariably used. The uniformity of prices proves that they have a cartel or price agreement for at least the American export market.

The cost of this German blue is as follows:

M 6,540 per 1,000 kilos, at present rate of exchange, namely, $1.25, equals (per 1,000 kilos)	$88.72
This is equivalent to (per pound)	37.09
Present duty at 20 per cent ad valorem	7.40
Freight, Hamburg or Bremen to New York, say	1.00
Total cost, laid down in New York duty paid	45.40

OBERLAHNSTEIN a. RHEIN, *December 7, 1920.*

MANGANO MANUFACTURING CO.,
Rahway, N. J.

DEAR SIRS: We are obliged to you for your inquiry of the 19th ultimo and in reply beg to say of that the blues asked for we can at the moment only offer you for prompt shipment about 2 tons of pure prussian blue powder, as per sample sent by same mail in separate cover. This we can offer you, subject to being unsold and subject to our confirmation of order by telegram, at the price of M. 6,540 per 100 kilos, in free barrels of about 100 kilos, c. i. f. Rotterdam, or f. o. b. Hamburg or Bremen, payment net cash against documents through credit to be opened with bank in Germany.

Hoping that you will find this suitable for your purposes and awaiting the favor of your order, we are,

SCHROEDER & STADELMANN,
Gesellschaft mit beschränkter Haftung.

AACHEN, *December 2, 1920.*

GENTLEMEN: We are in receipt of your favor of 15th ultimo and beg to send you under separate envelope samples of our guaranteed chemically pure blues, which we offer you, subject to fluctuations, as follows:

Milori blue, OO light, powder; milori blue, OO deep, powder; bronze blue, OO light, powder; bronze blue, OO deep, powder; bronze blue, HH light, powder; bronze blue, HH deep, powder; at marks 6,560.

Chinese blue OO, lumps, at marks 6,480; powder, at marks 6,540 per 100 kilos, taken in casks of 100 kilos at least, free delivered station Rotterdam, Amsterdam, or Antwerp, net cash without discount against bill of lading.

We are in a position to deliver you promptly from all milori and bronze blues, 5 tons of each, Chinese blue, 10 to 15 tons.

Hoping to be favored with your esteemed orders, we remain, sir,

L. VOSSEN & Co.,
Gesellschaft mit beschränkter Haftung.

GRUB B/ COBURG, *den 7th of December, 1920.*

I duly received your letter of the 18th of November, from which I noted with pleasure that you have interest for 50 to 100,000 pounds C. P. iron blues. But I am sorry to say that I am not in a position to deliver such quantities, as the raw materials are very scarce now. At this time I can promise you but several one thousand kilos, and hoping this will suffice you I beg to offer you as follows:

	Marks.
Prussian blue (potash) O, insoluble, pure, in pieces, at	6,480
Prussian blue (potash) OO, soluble in water, pure, in pieces, at	6,540
Bronze blue (potash) D. K., insoluble, pure, in pieces, at	6,500
Bronze blue, (potash) coppery, insoluble, pure, in pieces, at	6,500
Milori blue (potash) D. H., insoluble, pure, in pieces, at	6,520
Milori blue (potash) dark, insoluble, pure, in pieces, at	6,500
Milori blue (potash) extra fine, insoluble, pure, in pieces, at	6,500

The 100 kilos net, casks, or cases of 100 kilos at least included, freight free, Hamburg, net for cash within 30 days from the day of invoice. Grinded marks 60, the 100 kilos more. Samples of the different shades you receive with the same mail "registered." I shall be happy if my offer will give you a chance to do business. But let me add that the prices for raw materials are rising rapidly, so that I may be forced to do the same with my blues at not a long time.

SAMUEL FR. HOLTZAPFEL.

SULZBACH, *December 2, 1920.*

GENTLEMEN: In reply to your favor of July 3 we beg to offer you according to samples, registered, joined here:

Steel (milori) blue, light, steel (milori) blue, dark, steel (bronze) blue, coppery, 6,500 marks; Prussian (Chinese) blue, superfine, 6,480 marks; Prussian blue, dark, in scraps, 6,480 marks, per 100 kilos in lumps, powder, plus 60 marks; free on wagon Hamburg; no f. o. b. delivered; in barrels of about 150 to 200 kilos, net; cash against our invoice. Prices are the legal minimums and no permission for exportation is given below them.

All these blues are guaranteed chemically pure. We don't make poor blues.

A rise of prices is indicated for about the end of January and this offer can only be held for orders to hand 22d of January and up to 1,500 kilos of each of the five species, delivery then as soon as possible.

GEBR. APPOLT.

In case of any urgency please cable distinctly—the standard of blue being very limited continuously.

We add sample of Prussian blue, extra A, soluble in water, at 6,000 marks in lumps, and powder 6,060 marks.

Speciality for paper manufacturing.

We add another speciality, favored by paper mills (mainly for packing, etc., papers), our Prussian blue, extra I, soluble powder, 5,000 marks, per 100 kilos, same condition.

GEBR. APPLOT.

WHITING AND PARIS WHITE (PUTTY).

[Paragraph 60.]

A. HENRY HEIN, PRESIDENT BROOKLYN PUTTY WORKS (INC.), BROOKLYN, N. Y.

Mr. HEIN. A. Henry Hein, president Brooklyn Putty Works (Inc.), Brooklyn, N. Y.

Mr. Chairman and gentlemen, the putty manufacturers of New York City and vicinity, also Philadelphia, Pa., Boston, Mass., Providence, R. I., and Baltimore, Md., are interested in Schedule A, paragraph 60, of the present tariff.

The putty manufacturers recommend changing the present ad valorem duty of 15 per cent to an ad valorem duty of 75 per cent for putty imported. The reason: Said change is necessary if American putty manufacturers are to continue in business, as they can not compete with prices at which imported putty is sold in the United States due to deflated exchange value of foreign moneys.

All wooden, metal, and steel sash windows are glazed with some kind of putty, because no mechanical device has been invented to take its place.

Putty manufacturing has developed rapidly to keep pace with building construction, which of late years has grown to large proportions. The industry will continue to increase to meet the demand made necessary by new construction work. Putty manufacturers have a bright future, provided this industry receives proper tariff protection.

It is impossible for us to give the exact number of employees engaged in this business, but unquestionably there are thousands dependent upon this industry, throughout the United States.

The production of putty in New York City and vicinity, Philadelphia, Boston, Baltimore, and Providence can be estimated at from 40 to 50 million pounds for the year of 1920. Putty is made from whiting, which is a washed and powdered chalk.

Both imported and American made whitings are sold at present at about $1.50 per hundredweight, or at the rate of $30 per ton delivered at manufacturing plants. The cost to make, sell, and deliver 100 pounds of guaranteed pure linseed oil putty is as follows:

84 pounds whiting at $1.50 per hundredweight	$1.26
16 pounds raw linseed oil at market, 85 cents per gallon	1.81
1 steel drum	1.06
General expense items and provision for reserve, dividends and expansion	1.84
Total	5.94
The general expense is estimated at	25 per cent
For reserve, dividends, and expansion	6 per cent
Total	31 per cent

Imported putty, said to be made from pure linseed oil, and on which the duty has not been paid, can be purchased in New York City for $3.40 per hundredweight. If this imported putty should pay a duty of 75 per cent on its billed price, the price would then be increased to $5.94, which is the lowest price at which we can compete as shown above.

The wages paid to employees manufacturing putty in the vicinity of New York City is from $5 to $7 per day. We do not know the exact wages paid to putty manufacturers' employees in Europe; by newspaper reports, wages in foreign countries based on present exchange is about $2 a day American money.

We have found out by chemical analysis that some of the imported putty contains mineral oil, whereas the said putty was guaranteed to be absolutely pure linseed-oil putty. We would suggest as a remedy to overcome this deception that foreign manufacturers should be obliged to make oath as to the percentage of linseed oil and mineral oil (if any) contained in the putty to be exported, and this oath to be attached to consular invoice.

Up to this date most of the putty imported has been manufactured in Belgium. We would not find out the amount of Belgian putty which has arrived at the port of New York. We tried to get this information at the New York customhouse. The customhouse authorities said that putty was included in the general item of paints and therefore the amount of putty could not be determined by record. As might be supposed, the steamship lines refused the desired information. We estimate, however, that imported putty is arriving at the port of New York at the rate of about 100 to 200 tons a month. It has only been about six months that imported putty has put in an appearance in New York. Persons importing putty have received considerable encouragement, and it is to be expected that the amount of putty imported will be constantly increasing. Guaranteed pure linseed-oil putty in metal containers has been offered, duty paid, dock New York City, based on present exchange rates, at $3.91 per hundred pounds.

The only suggestions we can make in existing law is to have the oil content of the putty declared under oath by the manufacturer. Mineral oil is used to cheapen supposed pure linseed-oil putty, and this is manifestly unfair competition and should be stopped.

We can give no advice as to administrative features of existing laws with view to their betterment, except should your committee decide to impose duty by valuing at normal exchange rates the ad valorem duty be increased to 25 per cent.

(Mr. Hein represented the following manufacturers: Brooklyn Putty Works, Brooklyn, N. Y.; Alco Manufacturing Co., Brooklyn, N. Y.; Belknap-Moran-Allen Co., Brooklyn, N. Y.; Benj. Moore & Co. Brooklyn, N. Y.; E. V. Crandall Oil & Putty Manufacturing Co., Brooklyn, N. Y.; George D. Wetherill & Co., Philadelphia, Pa.; Hanline Bros., Baltimore, Md.; John Lucas & Co., Gibbsboro, N. J.; Colonial Works, Brooklyn, N. Y.; Devoe Reynolds Co., New York City.)

Mr. HULL. What goes into putty besides chalk and linseed oil?

Mr. HEIN. Nothing at all.

Mr. HULL. Isn't linseed oil the biggest item of expense, or is chalk?

Mr. HEIN. Yes, sir; linseed oil.

Mr. TIMBERLAKE. What is lacking in the putty which you state is being made without linseed oil?

Mr. HEIN. It has no body, has no value whatsoever, no binding quality nor nothing.

Mr. BACHARACH. You claim that putty is brought to this country and just deposited on the dock, and is billed out from the dock?

Mr. HEIN. It is being brought in. They have no orders. It is just brought in by the importers and is being offered to the various consumers, large consumers, and they get whatever they can for it.

Mr. LONGWORTH. You say the average price of putty is about 3 cents per pound?

Mr. HEIN. No, sir.

Mr. LONGWORTH. I thought you said $3 per hundred.

Mr. HEIN. They are bringing it in, and are offering it at $3.91, duty paid.

We can not sell for less than $5.94, figuring only 6 per cent for reserve dividends and expansion, and the Government taxes.

Mr. BACHARACH. I would like to say right there—I think it is pertinent at this point—that I have letters here from about a dozen different putty manufacturers who claim that the lowest price at which they can make this putty is 5½ cents.

Mr. LONGWORTH. Five and one-half cents a pound?

Mr. BACHARACH. Yes.

Mr. LONGWORTH. What was the prewar price?

Mr. HEIN. What was the prewar price? Well, gentlemen, the idea at present is to limit the importations——

Mr. LONGWORTH. I understand; but what was the average prewar price?

Mr. HEIN. The average price was about 3 cents.

Mr. LONGWORTH. Under the Payne-Aldrich law you only had a duty of about a half a cent, which would be about 10 per cent ad valorem. Now you are asking for 75 per cent, and that is a pretty high rate.

Mr. HEIN. We only want, gentlemen, an equal throw at competition.

Mr. LONGWORTH. Do you know any articles that have as high a rate of 75 per cent?

Mr. HEIN. I do not know of any. All we want is to be put on an equal footing with our foreign competitors. We invite competition.

Mr. LONGWORTH. Do you think these are normal conditions, or purely abnormal?

Mr. HEIN. So far as the importation is concerned?

Mr. LONGWORTH. Yes, sir.

Mr. HEIN. Well, I think it is not normal.

Mr. LONGWORTH. Seventy-five per cent ad valorem duty, rather shocks the average protectionist.

Mr. FREAR. Isn't the point that you are asking for that they be made to make affidavit, make a statement under oath whenever they ship this putty from abroad, that it is made from pure linseed oil, and that they show the difference between the mineral oil and the linseed oil.

Now, if they comply with that, would you think that we should have such a high tariff?

Mr. HEIN. Yes, sir; to our sorrow we would want it.

Mr. FREAR. Isn't mineral oil cheaper?

Mr. HEIN. Absolutely.

Mr. FREAR. Then they would be required to pay more money to manufacture this putty abroad than they are paying now.

Mr. HEIN. Well, one of the big items in putty is linseed oil. We are obliged to pay now 85 cents per gallon. It is higher here than it is in foreign countries.

Mr. FREAR. What is mineral oil worth?

Mr. HEIN. We have no idea what kind of mineral oil they are using. The price of mineral oil ranges anywhere from 15 cents to 50 cents per gallon, perhaps.

Mr. FREAR. You want them to make oath that it contains linseed oil, or mineral oil, or whatever it may be, and then you are calling upon us for an additional tariff?

Mr. HEIN. Yes, sir.

Mr. TREADWAY. If the exchange rate is equalized, or brought back to normal, you would still want 75 per cent?

Mr. HEIN. No, sir; a 25 per cent ad valorem duty would be sufficient.

Mr. GREEN. The exchange rates are in our favor, when they go to buy linseed oil, it would work against them?

Mr. HEIN. It would work against us. We are not certain what they are obliged to pay for their raw materials, namely, whiting and linseed oil. We do, however, know that Belgium imported whiting is offered in New York, duty and freight paid, at $1.10 per hundredweight, while our cost is, as already mentioned, $1.50 per hundredweight. Linseed oil is offered by some English importers, duty and freight paid, for 70 cents per gallon; our present market is 85 cents per gallon. We conclude from that that their raw materials are about 50 per cent lower than ours.

Mr. RAINEY. You also want this duty so you can pay dividends?

Mr. HEIN. We would like to continue paying dividends, yes, sir.

Mr. RAINEY. That is put in here in determining the price of $5.94?

Mr. HEIN. Yes, sir.

Mr. RAINEY. What dividends are you paying your stockholders now?

Mr. HEIN. Well, about 4 per cent.

Mr. RAINEY. How many times a year, how often do you pay 4 per cent?

Mr. HEIN. Semianmually.

Mr. RAINEY. That would be 8 per cent a year. What did you pay before the war?

Mr. HEIN. Well, something like that; about the same rate.

Mr. GREEN. You did not get——

Mr. RAINEY (interposing). What is your capitalization; what is the amount of your capital?

Mr. HEIN. The amount involved in my plant—I can not speak for all of the gentlemen, because I do not know.

Mr. RAINEY. Speaking of yourself?

Mr. HEIN. My plant is capitalized at $2,000, original capital stock.

Mr. RAINEY. Before the war?

Mr. HEIN. The same amount; no increase.

Mr. DICKINSON. What is whiting and paris white that you speak of?

Mr. HEIN. They are the same thing, they only go through different processes of manufacture.

Mr. DICKINSON. And the product manufactured with linseed oil is better?

Mr. HEIN. Yes; it is very much better, very much higher quality.
Mr. RAINEY. You are only a $2,000 corporation?
Mr. HEIN. Yes, sir.
Mr. RAINEY. And you only distribute $160 a year as profits?
Mr. HEIN. That is all, I am sorry to say.
Mr. RAINEY. And you pay how much salaries?
Mr. HEIN. Why, I do not have the figures; I can not say offhand.
Mr. RAINEY. What does the president of the company get?
Mr. HEIN. About $3,000.
Mr. RAINEY. And how many men do you employ?
Mr. HEIN. On an average about six.
Mr. RAINEY. Then, you want this tremendous increase of 75 per cent on the tariff in order to enable you to employ six men, is that it?
Mr. HEIN. Well, I am not only representing myself, but the entire trade, particularly the eastern trade. Although I have not the figures of their capitalization, I am certain that millions are involved.
Mr. BACHARACH. This matter is of interest to about a dozen different concerns. If you will read off the names of the companies which you represent that will furnish the information.
He is not only representing himself, but he is representing the industry.
The Brooklyn Putty Works, of Brooklyn——
Mr. RAINEY (interposing). What is it capitalized at?
Mr. HEIN. I have already answered that question for you, Mr. Rainey. However, if you want me to repeat it, it is $2,000.
Mr. BACHARACH. The Alco Manufacturing Co., Brooklyn, N. Y.
Mr. RAINEY. What is that company capitalized at?
Mr. HEIN. I can not say; I do not know.
Mr. RAINEY. We should have the information as to those questions.
Mr. BACHARACH. I know that some of the concerns which he is representing are very big concerns. Some of them are very wealthy concerns.
Mr. RAINEY. They should be represented by some one who knows something about them and can give us some information.
Mr. BACHARACH. We do not know that Mr. Hein is representing them. I know that the John Lucas & Co. is a very large concern.
Mr. RAINEY. We do not know that.
Mr. HEIN. The Devoe Reynolds Co. is a large concern, a millionaire concern.

FRANK A. FRITTS, REPRESENTING THE WILLIAM T. BAKER (INC.), JERSEY CITY, N. J.

Mr. FRITTS. Mr. Chairman and gentlemen of the committee, our concern is vitally interested in item 60, that part referring to whiting and Paris white, ground in oil or putty, 15 per cent ad valorem. We recommend that the duty be increased to 75 per cent ad valorem, or 2½ cents per pound specific duty, as shown on Exhibit "A." Exhibit "A" is as follows:

Importation cost——

Mr. LONGWORTH (interposing). Let me ask there. You say you want 2½ cents per pound on whiting and Paris white?
Mr. FRITTS. No; on putty manufactured from whiting or Paris white.

Mr. LONGWORTH. Two and one-half cents per pound plus 75 per cent ad valorem.

Mr. FRITTS. No; 75 per cent ad valorem or a specific duty of 2½ cents a pound.

Mr. LONGWORTH. Oh, I see.

Mr. FRITTS (continuing)—

Importation cost of pure linseed putty, ex duty as per papers attached is 115 francs per 100 kilos. This figured on the exchange at the rate of $0.50 per 100 francs gives the cost on dock of $3.40 per hundredweight; adding the duty of 15 per cent ad valorem, gives you a net cost of $3.91 per hundredweight.

I have before me a letter of December 3 from the Belgian Trading Co., of New York City, with reference to putty. This letter reads as follows:

GENTLEMEN: With further reference to putty, we are in receipt of a cable from our Antwerp office quoting us on putty containing 16 per cent linseed oil, guaranteed to be absolutely pure, packing in drums of 50 kilos at francs 115 per 100 kilos, gross for net c. i. f. New York.

The understanding is that the manufacturers will unreservedly guarantee the purity of the linseed oil, and the packing in metal drums will do away with the drying of the material when shipping in wooden containers, and we will appreciate if you kindly will let us know whether you are interested.

BELGIAN TRADING CO. (INC.),
P. DANCO, *General Manager.*

Mr. LONGWORTH. Let me ask you again about the duty you recommend. Two and one-half cents per pound would be considerably less than 75 per cent ad valorem.

Mr. FRITTS. Not based on the $3.40 cost; 75 per cent ad valorem on $3.40 will figure approximately 2½ cents.

Mr. LONGWORTH. But you do not figure tariffs on the cost.

Mr. FRITTS. That is on the franc basis. In other words, 115 francs per 100 kilos figure out at the present rate of exchange $3.40 per hundredweight.

Mr. LONGWORTH. Well, the witness before you said that the average price of putty is about 5 cents a pound here.

Mr. FRITTS. Oh, the manufacturing cost here is in the neighborhood of 5.90.

Mr. LONGWORTH. I am not talking about the cost; I am talking about the price. What is the price of putty, the market price of putty to-day?

Mr. FRITTS. It varies from 6 to 6½ cents, according to the locality and the conditions under which the manufacture is made.

Mr. LONGWORTH. Now, then, 2½ cents a pound, on the basis of 6 cents a pound, would be less than 40 per cent ad valorem.

Mr. FRITTS. You figure ad valorem on your invoice value, not on your selling cost here.

Mr. LONGWORTH. What is the invoice value?

Mr. FRITTS. 115 francs per 100 kilos, which figures $3.40 per 100 pounds.

Mr. LONGWORTH. In our money?

Mr. FRITTS. In our money; United States money.

Mr. LONGWORTH. At that rate 2½ cents a pound would be about 75 per cent.

Mr. FRITTS. Yes.

Mr. HULL. The exchange situation will continue at least for an indefinite length of time.

Mr. FRITTS. We have got to face it. We are not positive. We hope not. Of course, if we could come back to normal exchange at the present rates at which they are selling putty, it would mean $10.20 without any duty added.

Mr. LONGWORTH. Suppose we could arrange some method by which we could equalize the difference in exchange?

Mr. FRITTS. By equalizing the difference in exchange, if we based it on prewar values, that is, at $0.193 per franc, the duty would be $1.51; added to the $3.40, that would bring importation cost to $4.91, which would be in the neighborhood of about 1 cent shy, in order to be on a competitive basis.

Mr. LONGWORTH. But then your ad valorem would be very much smaller.

Mr. FRITTS. That is based on your present ad valorem of 15 per cent. We need ad valorem of 25 per cent, if we base the franc on the normal value.

Mr. LONGWORTH. You mean you want actual ad valorem, assuming that the exchange would balance, an average ad valorem of 25 per cent would be sufficient?

Mr. FRITTS. In other words, if you figure duty on a normal franc, even with the depreciated franc, we will need 25 per cent, but if the franc was normal, the American manufacturer would not need to worry. In other words, the normal rate would be $0.193; that would mean the cost of $10.20 without any duty. Then, you add your 15 per cent to that, they are practically getting twice—they would have to ask twice the cost of the American product and they would naturally be out of the field.

Mr. LONGWORTH. Your really great trouble to-day is the difference in the rate of exchange?

Mr. FRITTS. The difference in the rate of exchange. Depreciated so that only within the last few months have they been able to come in. Of course, during the war they were unable to manufacture. Within the last year they have taken it up. There are several importers in New York, the Belgian Trading Co., Michael A. Marks, another fellow by the name of Luskin, and a party by the name of Mylle, importing putty and distributing it around among the trade. The price runs from $3.40 to approximately 5 cents a pound. In other words, they are underneath our prices enough to make it interesting to the jobbers and also to the small or large retailers.

Mr. GREEN. If any has come in it must have come in recently, because the tariff reports down to October do not show any.

Mr. FRITTS. The reason for that is that in New York City putty is grouped with the paint importation, and it is not separated. So it naturally would not show.

The CHAIRMAN. Mr. Fritts, what is the market value here of your product?

Mr. FRITTS. We are selling to-day putty from 6 to 6½ cents per pound, according to quantity.

The CHAIRMAN. Six and 6½ cents a pound. At what price is the imported article imported? What is the value of the imported article in the country; do you know?

Mr. FRITTS. That is $3.40.

The CHAIRMAN. $3.40. Now, Mr. Fritts, if we could arrange to impose a duty based on our value, instead of on the foreign value,

we could very materially reduce the ad valorem and yet receive the same amount of money in duty paid and the same protection to your industry.

Mr. FRITTS. In other words you want to value the foreign money at the normal rate of exchange?

The CHAIRMAN. No. What I want to do is to value the foreign imports on our money, gold in this country, its value here, the value of the article made in this country, the competitive article.

Mr. FRITTS. In other words, you want the value at what it will cost us to produce it?

The CHAIRMAN. On the imported article. I want the imported article valued at your cost and not at the foreign cost, in our money, in gold.

Mr. FRITTS. We are not asking a duty anything in excess of our cost.

The CHAIRMAN. I am trying to help you, sir. Do not understand that I am antagonizing you. For instance, the article is sold over there for $3.40; that is the foreign export value; when it lands here it competes with an article that cost you $6.50.

Mr. FRITTS. No; it costs us $5.94, to be exact.

The CHAIRMAN. If $3.40 is their cost and not their selling price, then we want to figure your $5.90 as your cost.

Mr. FRITTS. Yes.

The CHAIRMAN. $5.90 as against $3.40. Now, if the duty were collected, an ad valorem duty were collected, on the basis of $5.90 as its value instead of $3.40 we cut that ad valorem right square in two, and yet give you the same amount of protection and get the same amount of duty for the treasury.

Mr. FRITTS. If that could be worked properly it would be satisfactory.

The CHAIRMAN. What you have got to get is this. Let me show you just an example. You have got to get $2.50 to bring their cost up to your cost; $2.50 and $3.40 makes $5.90.

Mr. FRITTS. Correct.

The CHAIRMAN. Now, I figure—I will figure that out in a minute.

Mr. GARNER. Mr. Fritts, what Mr. Fordney desires to know is: When you buy putty at $3.40 in France and bring it over here you will pay at the customhouse duty on it as though it cost $5.90. In place of calculating the duty on $3.40, what you paid for it, he is going to insist that the duty be collected on $5.90.

The CHAIRMAN. I will show you in just a minute what I would do.

Mr. GARNER. And in case next week or next month you could go up to $6.10, that is what you would calculate on; then you could go right on to $7.50 and you could calculate duty on that, although you might buy it for $2.60 in foreign countries.

The CHAIRMAN. Whatever the duty is, Mr. Fritts, whatever the difference is between the foreign cost and your cost, is what we are going to try to figure out and put in this law, so that the foreigner when he lands here will have his cost equal to yours. If it is under yours, he will put you out of business, will he not?

Mr. FRITTS. No question of it. But on an even basis with our salesmanship and ability we could compete.

Mr. GARNER. If the duty is less than the difference in the cost of production here and abroad, why, he will put you out of business, will he not?

Mr. FRITTS. Just repeat that, please.

Mr. GARNER. If the duty levied by Congress on an article that comes in competition with yours is less than the difference in cost of production abroad and your cost of production, he will finally put you out of business by selling lower than you can, will he not?

Mr. FRITTS. Yes, sir.

Mr. GARNER. On the other hand, if the duty is greater than the difference in the cost of production here and abroad, you will keep him from importing, and I naturally——

Mr. FRITTS (interposing). In other words, we will be able to compete; yes, sir.

Mr. BACHARACH. Then you would be in just the same position as you were before, because none of it has been imported, except in the last three or four months.

Mr. FRITTS. That is correct. They were unable to bring it in with the old duty of 15 per cent. It was barred from the market. That is based on normal exchange.

Mr. GREEN. One of the witnesses on this point said that the customhouse authorities said that putty was included in the general item of paint. That is not in the law, and if they are doing that they are not following the law.

Mr. FRITTS. That is the information we have been able to derive—we went to the customhouse to get quantity imported. All we have to bear us out is the letter here giving the quantities that they can offer, and showing that they have an immense quantity which they can dump on this market and which they are dumping at their advantage.

The CHAIRMAN. Mr. Fritts, the difference is this: We can arrange this law to impose an ad valorem duty on this article, the foreign cost of which is $3.40, based on your cost over here of $5.90. Now, in order to get the difference, enough to make up the difference between their cost and your cost to put them on a level with you, we would have to assess 73 and a fraction per cent ad valorem duty. If those values are on your cost, 42.2 per cent ad valorem will give you exactly the same protection and the same amount of revenue.

That is what I am trying to bring out. We can lower the ad valorem from 73 to 42 per cent and still give you the same amount of protection and get the same amount of revenue for the Government——

Mr. HAWLEY (interposing). By basing that tariff on the American cost?

The CHAIRMAN. Basing that tariff on the American value of $5.90 we could raise 42 per cent to offset the difference between the foreign cost and the cost in this country, whereas if we place the duty upon the foreign value we must have 73 per cent to give the same protection.

Mr. HULL. Mr. Fritts, under that plan of basing the assessment on the domestic prices and domestic products, our domestic producers, to the extent that they might be able to raise or lower prices, might raise or lower the tariff assessment as they saw fit.

Mr. FRITTS. That could be easily arrived at. You have the cost of your oil, the cost of your whiting, the cost of your container. Now, by resorting to the archives of the income-tax commissioner here in the city you could find out the overhead of these different manufacturers.

Mr. HULL. But they are not proposing that, as I understand it. They are proposing to take the market price; not the cost.

Mr. FRITTS. They claim the cost price.

Mr. HULL. You are not asking for the market price in this country as the basis, but only the cost, as I understand it.

Mr. FRITTS. But what you want to do, you want to understand how you can find out whether the manufacturer is giving a fictitious price or a legitimate price; is that your idea?

Mr. HULL. No; I just asked you, Under the plan proposed by the chairman, if it would not be possible for the domestic manufacturer and producer to the extent that he might be able to fix prices—that is, to raise prices—he could correspondingly raise or lower the tariff levied?

Mr. FRITTS. Well, as stated before, it would be easy enough to prove this by going to your archives here in Washington and finding out the overhead of any manufacturer, also the cost of the raw materials, which are very easily obtainable.

Mr. GARNER. There are some articles in this country that are manufactured by one or two people only. Now, they could, as a matter of fact, fix their price at whatever sum they might deem proper, and the foreigner would have to pay to come into this market an ad valorem duty, we will say, upon that price, which means exclusion in terms.

Mr. FRITTS. It would be impossible in this case. We have in the vicinity of New York City, within 150 miles, 21 manufacturers.

Mr. GARNER. I am not speaking of your article alone; I am speaking now of testimony before the committee. The testimony before the committee already is that there are a number of articles produced in this country that are produced by one or two firms, and they can fix the price at whatever sum the market will bear; and when they want to fix the price for the purpose of assessing the duties they would make it just as high as they saw proper, which would mean exclusion.

The CHAIRMAN. Mr. Fritts, how much longer will it take you to finish? We would like to hear one more witness before noon adjournment in a few minutes.

Mr. FRITTS. I can file this brief. It is all very plain; only I would like to have one word with you. There was a question brought up about mineral oil and putty. Now mineral oil is only used to cheapen an article, and makes it mighty inferior. In other words, it cuts down the lasting qualities. When these importers offer pure linseed-oil putty, and it comes in here adulterated, the majority of the people that are buying it will not go to the trouble of having it analyzed; but we have found that it runs about 8 to 9 per cent, which is a very small percentage. In other words, that is 8 to 10 gallons of oil on 5,000 pounds of putty, which is a very small saving of possibly $2 to $2.50. It is a small item, as far as we are concerned, but it makes the purchaser sell this material under misrepresentation. We have

already taken the matter up with one manufacturer. We bought it as pure, brought it here, looked into it to see how the material was, and, as I said before, we had it analyzed, and found it was 9 per cent impure.

Mr. LONGWORTH. Is your situation not typical of a number that have been placed before us in the last few days, that up to three or four months ago you were practically without foreign competition of any great extent, but that in the last three or four months there has been a dumping process going on, and it has hurt you, and will if it keeps on? But are we to believe that that dumping process is to be normal and continue for years to come?

Mr. FRITTS. As long as your currency, foreign currency, is depreciated you can expect——

Mr. LONGWORTH (continuing). It rests in your opinion on depreciated foreign currency?

Mr. FRITTS. As far as we are concerned, it rests entirely on the depreciated currency, and as long as that continues they will import it and we fear to think what will happen to one or two other countries, providing they can get the coal, raw material, and oil with which to manufacture putty, considering their depreciated currency.

The CHAIRMAN. Does this only come in so far from Belgium and England?

Mr. FRITTS. No, sir.

Mr. HAWLEY. Does putty made from mineral oils and oils other than linseed stand up under weather tests as well as the putty made with linseed oil?

Mr. FRITTS. It will not. The only reason they use oil is because the jobbers, the dealers, want an article that they can sell cheap, and they adulterate it with mineral oil to the detriment of the house owner and the manufacturer who is putting up a permanent structure.

Mr. GREEN. Ought that kind of putty to be used at all?

Mr. FRITTS. It should not be used, but if there is no bar against manufacturing it, and the man insists upon it, and you have unscrupulous manufacturers throughout the country, that will go to work and add this oil to it and undermine you, you have got to manufacture to meet those conditions.

Mr. GREEN. We can very easily provide against that by making a regulation that all putty composed of mineral oil—that had mineral oil in the compound—should be so branded.

Mr. FRITTS. I will leave these papers for the record.

JERSEY CITY, N. J., *December 30, 1920.*

MY DEAR SIR: (1) We are interested in item 60, namely, "Whiting and Paris white, ground in oil, or putty, 15 per cent ad valorem." Recommend that duty be increased to 75 per cent ad valorem or 2½ cents per pound, specific duty as shown as Exhibit "A."

Reason for change is that putty is being imported and sold at less than cost of domestic production as shown on Exhibit "B."

(2) Millions of pounds are manufactured and sold by manufacturers throughout the United States. It is highly developed and will expand with construction work. Thousands of employees are engaged in the industry.

(3) Exhibit "C" shows present cost of domestic production. Thousands of pounds are being imported at one-third the cost of domestic production. Putty imported as a pure linseed-oil product has been found to be mixed with other oils than pure raw linseed oil.

(4) Exhibit "B" shows importation price, ex duty, New York City.
(5) Whiting and Paris white, ground in oil, or putty 2½ cents per pound or 75 per cent ad valorem.

FRANK A. FRITTS, *Vice President.*

EXHIBIT A.

Importation cost of pure linseed putty, ex duty as per papers attached, is 115 frs. per 100 kilos. This, figured on the exchange at the rate of $6.50 per 100 frs., gives the cost on dock of $3.40 per cwt., adding the duty of 15% ad valorem will give you a net cost of $3.91 per cwt.

In order to place on even basis with the cost of domestic production we recommend that either a duty of 75 per cent ad valorem or a specific duty of 12½ cents per pound be levied.

EXHIBIT B.

NEW YORK, *December 3, 1920.*

GENTLEMEN: With further reference to putty, we are in receipt of a cable from our Antwerp office quoting us on putty containing 16 per cent linseed oil, guaranteed to be absolutely pure, packing in drums of 50 kilos, at frs. 115 per 100 kilos, gross for net, c. i. f. New York.

The understanding is that the manufacturers will unreservedly guarantee the purity of the linseed oil, and the packing in metal drums will do away with the drying of the material when shipping in wooden containers, and we will appreciate if you kindly will let us know whether you are interested, and oblige.

BELGIAN TRADING COMPANY (INC.),
———— ————, *General Manager.*

DEAR SIR: We are in receipt of a cable from our Belgian friends offering us, subject to being unsold, 100 tons putty, containing 16 per cent pure linseed oil and no other oils, packed in cases each containing 2 tins of 35 kilos each, the price quoted us is 118 francs per 100 kilos c. i. f. New York in bond.

Kindly let us know whether you are interested and oblige.

BELGIAN TRADING COMPANY (INC.),
———— ————, *General Manager.*

DEAR SIRS: We have not as yet received a reply from our Belgian office with regards to the 25 barrels putty, but we surmise that they are waiting to receive the original of the analysis which we have forwarded to them.

We now beg to inform you that we are in receipt of a cable offering us putty of the same factory from which we have already imported this material with good results for account of other parties in the United States. This means that the putty we are quoting you to-day is not from the same factory as the material shipped for your account. The offer is made to us subject to prior sale for the amount of 35 tons per month during six months. The manufacturers absolutely guarantee the purity of the linseed oil, the percentage of which is 16 per cent.

The offer is made as follows:

A. In barrels $2.50 per 100 pounds c. i. f. New York in bond.

B. In tins of about 35 kos. each $4.50 per 100 pounds c. i. f. New York in bond.

Owing to the fact that the manufacturers guarantee the purity of this linseed oil and also that the putty will be packed in tins and not in barrels, we will esteem it a favor if you kindly will let us know whether you would be interested and oblige.

BELGIAN TRADING COMPANY (INC.),
———— ————, *General Manager.*

EXHIBIT C.—NET MATERIAL COSTS.

84 pounds whiting @ $1.50 per hundredweight	$1.26
16 pounds raw linseed oil @ $0.85 per gallon	1.81
Steel putty drums	1.03
Net cost material to produce 100 pounds putty with package	4.10

Necessary percentages of $1. Gross sale to conduct a manufacturing business successfully, as follows:

Overhead, including wages, repairs, postage, traveling, and other credited:

General expense items	per cent	25
For reserve, dividends, and expansion	do	6
		31
Gross sales represented as	do	100
Necessary percentage to conduct business	do	31
Balance or material cost	do	69

If 69 per cent of gross sales price equals $4.10, 100 per cent of gross sales prices will equal $5.94 a hundred pounds.

EXHIBIT D.

WHITAKER-GLESSNER CO.,
Wheeling, W. Va., October 7, 1920.

GENTLEMEN: In response to your favor of the 1st we are pleased to quote for immediate acceptance on black steel putty drums and covers, coated red outside, lacquered inside, 12¼ inches in diameter, 17 inches deep, f. o. b. Wheeling, W. Va., $113 per 100 drums.

Terms, 30 days net, or 1 per cent for cash if paid within 10 days from date of invoice.

This quotation is for prompt acceptance, subject to change without notice. The order, if we are favored with it, would not be subject to cancellation or price revision, and would be subject to delays due to strikes, accidents, or other causes beyond our reasonable control.

In regard to shipment, we can not say definitely when an order could be executed, although it is possible that we would be able to ship in about six to eight weeks. This tentative promise is subject to all contingencies.

We note that the drums which we have been supplying you in the past will hold only 125 pounds of the putty which you manufacture. It occurred to us that it might suit you best to use a larger size container to hold probably 150 pounds, and in this event please advise and we will be glad to figure out something to suit this purpose.

The reason we are unable to give you as good service as we have on your previous orders, is because the stock which we happened to have on hand at that time is entirely depleted.

Mr. BACHARACH. Mr. Chairman, I want to leave half a dozen letters with the clerk to be inserted in the record. They are pertinent to this very subject.

BROOKLYN, N. Y., *January 3, 1921.*

WM. T. BAKER (INC.),
228 Suydam Avenue, Jersey City, N. J.

GENTLEMEN: As per conversation with you this morning we confirm our approximate figures on putty which are as follows:

Our one year's production amounts to about 200 tons at an average price of 5½ cents per pound, making the total money value $11,000.

Trusting that this is the information desired, we remain.

COLONIAL WORKS,
C. W. GRIFFIN, *Treasurer.*

BROOKLYN, N. Y., *December 31, 1920.*

GENTLEMEN: We have manufactured in the past year 370,000 pounds of putty or sold same at an average price of 5½ cents per pound; there are 5 men employed in this business and our running expense is about $200 per week.

"ALCO" MANUFACTURING CO.,
75 Furman Street, Brooklyn, N. Y.

BROOKLYN, N. Y., *January 3, 1921.*

To whom it may concern:

This is to certify that the amount of putty manufactured and sold by us in the year 1920 amounted to 923,800 pounds comprising our various grades, and making a total income to us from this channel $50,890 for the above merchandise.

BROOKLYN PUTTY WORKS (INC.),
B. HEIN, *Secretary.*

BELKNAP-MORAN-ALLEN CO. (INC.),
Brooklyn, N. Y., January 5, 1921.

GENTLEMEN: This is to certify that we, the undersigned, had a production of approximately 2,185,000 pounds of putty during the past year at an average cost of 5½ cents per pound, and that we have in our employ 16 men at an average wage of $30 per week.

BELKNAP-MORAN-ALLEN CO. (INC.),
CHAS. W. ALLEN, *Secretary.*

BALTIMORE, MD., *January 5, 1921.*

DEAR SIR: Replying to yours of January 5, beg to advise we manufacture approximately 275 tons of putty per year, approximate value of which is $100 to $110 per ton, and in the course of the manufacture we require from six to eight employees.

We do not conscientiously see, nor can we figure, where the manufacturers receive any profit when they offer a strictly pure linseed-oil putty at $3.91 per hundredweight, duty paid, dock New York City.

We sincerely trust that the efforts which your committee will use regarding the duty on putty will be of such a nature so as to discourage the importation of this article.

HANLINE BROS.

PUTTY DEPARTMENT PRODUCTION, 1920.

Whiting and other pigments used	pounds	4,031,009
Putty of all kinds produced	do	4,742,363
Average selling price, 4,742,363 pounds, at 5½ cents a pound		$260,829.97
Number of people dependent upon this product		41

WILLIAM T. BAKER (INC.),
Per FRANK A. FRITTS, *Vice President.*

BRIEF OF WHITING AND PARIS WHITE MANUFACTURERS OF CAMDEN (N. J.), PENSACOLA, PHILADELPHIA, AND NEW YORK CITY.

1. The undersigned are American manufacturers of whiting and Paris white, made from chalk—raw (or crude)—and is the sole business in which they are engaged.

2. Whiting and Paris white, and chalk ground or bolted, are different grades of the same material, i. e., natural chalk, ground, washed, and bolted.

3. There are no deposits of chalk in the United States from which satisfactory whiting and Paris white can be manufactured. The raw material (chalk) is imported and comes principally from England and France.

4. There is great competition between (a) American and (b) foreign manufacturers of whiting and Paris white.

5. The American manufacturer manufactures and sells his product in the United States.

6. The foreign manufacturer manufactures his product abroad. He there has the advantage of lower labor costs and lower manufacturing costs. His factory adjoins his chalk quarry. There is no extra handling of his raw material, and furthermore his freight to the United States is on his finished product, whereas the American manufacturer must pay for and pay freight on raw material, only about 75 per cent of which can be used—the remaining 25 per cent being flint, sand, and moisture, which are absolutely useless.

7. Foreign manufacturers of whiting and Paris white are offering their product in the United States at a price which is less than the price at which the American manufacturer can offer his product.

8. The tariff act of 1909 carried a duty on whiting and Paris white of one-fourth cent per pound.

The tariff act of 1913 reduced this duty to one-tenth cent per pound, which was and is inadequate.

9. This present duty is covered in Schedule A, paragraph 60, which reads as follows: "Whiting and Paris white dry, and chalk ground or bolted, one-tenth cent per pound; Whiting and Paris white, ground in oil, or putty, 15 per cent ad valorem."

10. The American manufacturer, in order that his investment in property, plant, and machinery may be protected against foreign competition, advocates a duty of one-half cent per pound on whiting and Paris white as a necessary duty.

SOUTHWARK MANUFACTURING CO.,
of Camden, N. J., and Pensacola, Fla.
THE H. F. TAINTER MANUFACTURING CO.,
of New York.
G. W. MACKENZIE, *Philadelphia, Pa.*
WILLIAM KNAPMANN, *New York.*

SLAB ZINC (SPELTER.)

[Paragraph 62.]

BRIEF OF AMERICAN ZINC, LEAD & SMELTING CO., BOSTON, MASS.

Consideration of this subject can best be crystallized by a few questions, the answers to which should, to a considerable measure, be the basis for deciding what tariff on slab zinc is required, viz:

1. Have conditions bearing on the tariff problem of this country as applied to slab zinc (spelter) changed since the Underwood bill was enacted in October, 1913?

2. Are these changes, if any, permanent or temporary?

3. If a modification of the tariff is advisable, on what premises should the new tariff be based?

4. What should the amount of that tariff be on slab zinc imported into this country, and should the present method of computing the duty by an ad valorem basis be retained, or should it be changed to a specific basis, as in the Payne-Aldrich bill?

1. The answer to question 1 requires a careful consideration of the zinc production situation of the entire world, and for the purposes of this tariff matter we should confine our answers to those factors which now exist or which will become effective within the next five or six years.

DOMESTIC CHANGES.

(*a*) *Freight rates increased.*—The United States is a big country, and freight from points of production to points of consumption play an important part in the total cost of zinc to the consumer. Since 1913 freight rates have, generally speaking, more than doubled on both zinc ore and slab zinc. To give a typical illustration, the freight on slab zinc from the usual price-basing point, St. Louis, to New York, where it comes into competition with imported spelter, has increased from 0.15½ cent per pound to 0.49 cent per pound, plus 3 per cent war tax, a total of 0.50½ cent per pound, being an increase of 0.35 cent per pound or over 225 per cent. Freight on zinc ore from the Joplin field (one of the principal shipping points in the United States) to St. Louis in 1913 was $2.30 per short ton; to-day it is $4.20, and with 3 per cent war tax, $4.33; an increase of $2.03 per short ton, or 88 per cent.

Estimating 1,000 pounds of slab zinc recovered from 1 ton of ordinary Joplin-Oklahoma zinc ore, it is seen, as a fair example of what increased freights mean in added costs, that the increase in freights on ore and slab zinc to New York have added 0.55 cent per pound to the cost of the slab zinc delivered at that point. Western zinc ore producers are even more seriously affected by the freight increases.

So far as one can see at present, these freight rates are permanent for the period under consideration.

(*b*) *Missouri-Oklahoma-Kansas field developed.*—Since the Underwood bill was passed a large and entirely new ore-producing district, known as the tri-State or Missouri-Oklahoma-Kansas district, has come into prominence. To-day it is the most important ore-producing district in the country, employs more labor (all Ameri-

can) than any other zinc section, and with reasonable protection gives promise of retaining this position for many years to come.

(c) *Slab zinc producing capacity increased.*—In addition to a large extension of the capacity of the natural gas field zinc smelters, there has been an extensive investment in permanent coal fired zinc smelters of a very expensive type, the following new plants having been completed since 1913, viz:

Name of plant.	Owned by—	Retorts.
Langeloth	American Metal Co	7,296
Terre Haute	Grasselli Chemical Co	4,200
Moundsville	United Zinc Smelting Co	3,456
Donora	United States Steel Corporation	9,120
East St. Louis	American Zinc, Lead & Smelting Co	5,620
Total		29,692

The approximate annual productive capacity of the above plants at 4.25 tons per retort is 126,000 tons of slab zinc, and they represent new investment, including the associated acid plants, of perhaps $15,000,000.

Also, a very large electrolytic zinc plant, with an annual slab zinc capacity of 50,000 to 60,000 tons, has been constructed by the Anaconda Copper Mining Co. at large expense, and other smaller electrolytic plants have been constructed throughout the country. These large investments entitle the industry to a tariff sufficient to give them and their workmen proper protection.

(d) *Western supplies of zinc ore increased.*—Since 1913 large investments to open up and develop mining properties throughout the far West have been made, and these mining properties and their workers are entitled to proper consideration.

(e) *Costs of mining and smelting increased.*—Since 1913 costs of producing zinc ore have increased from 50 per cent to nearly 100 per cent, and those of smelting zinc ore at American smelters have more than doubled. Present costs are somewhat higher than they probably will be within the reasonably near future, but one can not expect a return to prewar costs either in mining or smelting. In zinc smelting, as a relatively large share of the cost consists of hand labor and coal, one can not expect the same degree of return toward prewar conditions as in the smelting of the other base metals.

FOREIGN CHANGES.

(a) *Effect of metallurgical improvements.*—Since 1913 there has been a great advance in the metallurgy of zinc, both as regards improved mill recovery of zinc from crude complex ores for subsequent treatment to produce slab zinc, and also in the development of the electrolytic process of producing slab zinc (which is usually applicable to the ores at or near the point of their production, thus materially reducing the freight factor), and this method has already been introduced on a large scale basis in Tasmania and is to be used there on a very much larger scale in the near future.

The cost of producing slab zinc by this electrolytic method depends to a large extent upon the cost of the lectric power consumed, and as the electricity used in electrolytic zinc production has thus far invariably been developed from water power, the costs of producing zinc by this method have not gone up comparably with those of the fire smelters.

By these metallurgical improvements the situation relative to some very large deposits of zinc ore in different parts of the world has been changed so that whereas in 1913 they were not factors seriously to be reckoned with, now it is possible for slab zinc to be produced from such sources at a cost considerably below what can be done in this country on any large known body of ore devoted to such production.

(b) *Additions to zinc-producing capacity in Europe.*—As in this country, the pressure of war forced an increase in the zinc-smelting capacity of Great Britain by extensions to various smelters already in existence, and by the construction of one very large plant, which is almost completed. With the increased slab zinc producing capacity of Great Britain, and of the British Empire elsewhere, it would appear that the British, heretofore the principal importers of slab zinc, are likely in the future to be more nearly able to produce their own requirements, and will not have to rely upon the production of the continental zinc smelters, thus making it necessary, if the latter operate, to find new outlets for their production.

(c) *Mexican possibilities.*—The ability of Mexico to produce zinc ores on a large scale has never really been put to the test, but well-informed mining men know that

large supplies of zinc ore are available in Mexico, when matters are quiet there, for export either to this country or to Europe.

With the Broken Hill Australian output under contract to them, the principal European smelters never felt the necessity of using Mexican zinc ores to any large extent, but as these Australian ores are not now likely to be available again to Germany and Belgium on the same scale as hitherto, it is probable that these countries will find the ores they need to take the place of the Australian ores, in these Mexican ores; so it should not be reckoned that taking away the Australian ores will shut down the continental fire smelters for any considerable time. In addition, there is likely, on account of the increased freight rates on zinc ores from Mexico to the United States, to be substantial development in Mexico of fire smelting based on oil as fuel. One zinc smelter using oil for fuel has already been established at Saltillo, and under stable conditions in Mexico it very likely will be extended. Before 1913 Mexico was not rich in cheap fuel, but since 1913 the fuel-oil resources of Mexico have been exploited on a large scale, and it is now reported that oil has been discovered in the immediate zinc-producing area of that country.

With protection of investments in Mexico assured, with its cheap labor, its cheap zinc ores, and its now enormous quantity of cheap fuel, Mexico becomes a potential producer of slab zinc comparable at least to, and possibly greater, than Australia and Burmah.

(*d*) *Effect of the termination of the Kartel agreement.*—Prior to the war there existed an agreement amongst the European slab-zinc producers to maintain production only on a basis which would insure at all times a reasonable return on the capital invested. This agreement, now terminated, had the effect of maintaining prices in London, the price-basing point, at probably a higher level than otherwise would have been the case. Unless some such new agreement is effected (and one can not see any signs of this at the present time, nor would one expect it under the changed conditions) the London market, on the average, is likely to rule at a lower level than it did under the Kartel arrangement.

(*e*) *Foreign exchange.*—In one of the preceding paragraphs brief mention was made of foreign exchange. Never before has it been necessary to take the question of exchange into consideration in framing a tariff, but conditions have been so completely upset by the war that one can not afford to overlook the state of affairs existing in regard to foreign exchanges. We find the pound sterling worth not much over 70 per cent of its normal par, the franc at not much over 30 per cent of par, and the mark at not much over 5 per cent of par. If the foreign exchanges of these countries are to remain permanently at a discount, recognition of this must be taken into account in framing a tariff.

2. Answering question 2, we do not see any reason for doubting that all of the changes above mentioned will be permanent, except that the costs of mining and smelting zinc ore may be reduced somewhat. In view of the large national budgets which are a necessity for many years to come, it is impossible to expect a permanent return to a general prewar cost basis during the period under consideration.

Possibly some arrangements may be made to rectify the foreign exchanges.

3. The policy of the Republican party in regard to tariff has always been to provide such tariffs as will protect industries of the United States, both as to their wage earners and investors.

This country can produce all the slab zinc from its own ores that the country needs, but to do so requires adequate protection, as shown herein.

4. The amount of tariff required should, of course, be based on the difference in production cost as between the United States and foreign countries and under normal circumstances a reasonably accurate statement of the costs of America's principal competitors could be prepared for the use of the committee, but authoritative statistics of the costs in some of the chief competing countries are not readily obtainable under present conditions.

In Europe, before the war, the two principal slab zinc producing countries were Germany and Belgium, Germany being the larger. Before the war, and since, both the United States and Germany produced practically their entire output of slab zinc from their own raw materials and with their own labor. German wage rates before the war, in a general way, were approximately one-half the wage rates of American labor. The cost of slab zinc produced in Germany before the war was approximately 80 per cent of that in America. The relative wage rate in Germany, expressed in dollars and cents at current rates of exchange, is now about one-fifth of the American rate. This works a relative cost in Germany to-day of about one-third of that in America. Based on an American cost of 6.60 cents, the difference between this and the German estimated cost of 2.20 cents, would be 4.40 cents per pound. This extreme difference is not likely to be permanent.

Belgium, the next largest producer in prewar times, having no zinc ores, is under the necessity of purchasing them from countries with exchange rates probably against her, so that her situation from the standpoint of cost is not so favorable as that of Germany.

Within the past two weeks slab zinc originating somewhere in Europe, was selling in London, and was probably bought for import into this country, at a price at least 2 cents per pound f. o. b. New York, plus 15 per cent, duty paid, below the estimated bare operating cost of producing slab zinc from Oklahoma ores, plus the freight to New York.

On the cost of producing slab zinc in other parts of the world than Europe, we have an authoritative estimate by the company operating the electrolytic zinc plant in Tasmania, of what it expects to do commencing January 1, 1923. In a circular recently put out by this company, which has powerful financial backing, a skilled and experienced organization, and has been operating its electrolytic zinc plant in Tasmania for two years, it is stated that with slab zinc selling in London for £30, the net profits of the company, after making all necessary provision for depreciation and amortization, will be at the rate of £413.000 per annum from the beginning of 1923. Based on an output of 100 tons per day, the capacity this plant is expected to reach in two years, this would mean a cost, including all depreciation and amortization, of 2.92 cents per pound (American basis) for slab zinc f. o. b. London when the exchange is $3.50, or 4.06 cents when the exchange is $4.86. As the ocean freight from Tasmania to New York will not differ materially from the ocean freight to London, the above costs would represent about what the slab zinc could be laid down for in New York, duty unpaid.

To get some idea of how this cost compares with United States costs, based on Oklahoma ores, and fire smelting, we have made the following tabulations which, it should be distinctly observed, does not include depletion, depreciation, or interest in the costs of either mining or smelting.

	Present.	Probable.	Minimum.
1short ton of 60 per cent Oklahoma zinc ore f. o. b. mines price	$30	$30	$30
Freight and hauling thereon to St. Louis territory, including moisture	6	6	6
Smelting	25	20	15
Total	61	56	51

	Present.	Probable.	Minimum.
	Cents.	*Cents.*	*Cents.*
Cost per pound of spelter	6.10	5.60	5.10
Freight to New York	.50	.50	.50
Cost f. o. b. New York	6.60	6.10	5.60

In regard to 60 per cent Oklahoma ore, we have used $30, which is about the current price level, but admittedly very few mines can pay even operating expenses on this basis, and many of them have had to shut down. Information on the question of the cost per ton of 60 per cent zinc ore undoubtedly will be forthcoming from the Oklahoma producers so that substitution of the proper amount for the figure used here can be made, and the cost of slab zinc adjusted accordingly.

To cover depletion, depreciation, selling expenses, and allow a fair return on mining and smelting investments, would require an additon to the cost of slab zinc in this country of 2 to 2½ cents per pound, depending upon conditions.

As regards whether the tariff should be on an ad valorem or specific basis, we prefer the specific basis because we have already seen that the question of exchange, over which we can exercise very little control, may have the effect of reducing the duty when perhaps protection is most needed.

Comparing American costs on Oklahoma ore with the Tasmanian costs, which include depletion and amortization, it is seen that a tariff of at least 3 cents per pound is necessary for the preservation of the American slab zinc industry on a reasonably prosperous basis.

WILLIAM A. OGG, *President.*

CERAMIC COLORS.

[Paragraph 63.]

BRIEF OF ROESSLER & HASSLACHER CHEMICAL CO., NEW YORK CITY.

We respectfully petition that ceramic colors, classified under the above-mentioned paragraph, to wit, "all ceramic and glass fluxes, glazes, enamels and colors, whether crude, dry, mixed, or ground with water or oil or with solutions other than oil, not specially provided for in this section," be made dutiable at 45 per cent ad valorem, and when put up in vials and tubes, for use by amateur artists, for china and glass painting, at 60 per cent ad valorem.

Description.—The ceramic colors are a distinct article of commerce, comprising a variety of metallic vitrified preparations, part in powder and part in liquid form, commonly known as stains, color bodies, fluxes, fusible enamels (over and under glaze), glazes, etc., only suitable in coloring and decorating metal, porcelain, glass, pottery, and other earthen and clay wares.

These ceramic colors are composed of metal oxides, either singly or in combination with a flux, to assist the melting on the material to be colored or decorated and accordingly be especially prepared.

The ceramic colors differ essentially from all other kinds of pigments, paints and dyes, requiring a firing process at a high degree of temperature from 900 to 3,000° F. to bring out their rich color effects.

The manufacture of these ceramic colors is complicated and it takes a well trained and competent staff to produce these colors and to market the same. With the constant change of fashions, new color effects appear on the market which must be matched, and it is therefore necessary to keep a large stock of both raw materials and the finished products on hand.

Tariff.—During previous tariff acts, ceramic colors were dutiable at 30 per cent ad valorem, and under the Dingley Tariff Act litigation arose to have the same classified under the paint schedule at a few cents per pound, as some of the ceramic colors were prepared from chrome, lead and zinc oxides. This contention was held to be untenable as some of the more expensive colors, such as maroons, purples, rubies, etc., the basis of which are the precious metals, selling at as high as $25 to $30 per pound.

In 1884 we began to specialize in ceramic colors but have not made very rapid progress due to the fact that the customs duty has not been adequate to equalize the advantage which centuries of experience has given these products of foreign manufacture.

Foreign competition.—The foreign manufacturers of ceramic colors in England, France, Germany, and Austria, with years of experience have established reputations for their respective brands. While we have demonstrated beyond question our ability to supply the domestic demand for colors, equal in quality to any produced abroad, we are unable to successfully compete with the foreign producers under the existing tariff rate.

Under the ceramic-color provision, duty should also be correspondingly adjusted for decalcomanias in ceramic colors, paragraph 325, now dutiable at 60 cents per pound; fusible and glass enamel, paragraph 96, now dutiable at 20 per cent ad valorem; and glass enamel, white, for watch and clock dials, paragraph 493, free of duty, under the tariff act of 1913, be stricken out, having been held according to the United States Court of Customs Appeals (T. D. 32983, Nov. 21, 1912) as being rather a color than an enamel.

Although the ceramic-color industry is not very large it offers a good opportunity for revenue.

We therefore petition that the ceramic colors be made dutiable at 45 per cent ad valorem, and when put up in vials and tubes, to be used by amateur artists, for china and glass decorating, at 60 per cent ad valorem.

LOUIS RUHL, *Assistant Secretary.*

CRAYONS.

[Paragraph 63.]

BRIEF OF CAREY W. HOOD REGARDING CRAYONS AND CHALK CRAYONS FOR EDUCATIONAL, TOY, AND INDUSTRIAL USE.

When it became publicly known that the tariff was up for revision, the few concerns interested in the crayon and chalk industry held a conference and appointed the undersigned to represent them before the committee and placed in his hands general data for the proper presentation of the case. This brief is therefore filed on behalf of the Standard Crayon Manufacturing Co., Danvers, Mass., the Milton Bradley Co., Springfield, Mass., the Binney & Smith Co., New York City, and the American Crayon Co., Sandusky, Ohio. These firms represent probably over 80 per cent of the present production of crayons and chalk crayons, and crayons and chalk for specialized industrial uses in this country at the present time.

The items mentioned in your General Notice of Tariff Hearings of December 8 are taken up as follows: Schedule A, paragraphs 15, 63, and 69; Schedule N, paragraph 367.

CHANGES AND DUTIES RECOMMENDED.

That crayons, chalk crayons, and crayons and chalk for specialized industrial, educational, and toy uses, which are various forms, shapes, and combinations of similar and like substances, be classified together, described as follows:

> Crayons, including gypsum, wax, pastel, pressed, charcoal, fusains, and other combinations of wax and mineral bases, such as lumber, metal workers, glass marking, upholstering, and other forms of crayons for industrial, educational, and toy use, and chalk crayons and chalk, whether in cubes, blocks, sticks or disks, or otherwise, including red, tailors, billiard, railroad, carpenters, blackboard, or other forms of chalks for industrial, educational, and toy use, and all other manufactures of crayons or chalks not specifically provided for.

be given the protection of a 60 per cent ad valorem duty. To do this it will be necessary to amend paragraph 367, Schedule N, by adding thereto an exception in the case of wax used in crayon or chalk combinations; by amending paragraph 69, Schedule A, by adding thereto an exception in the case of chalk used in crayon form; by amending paragraph 63, Schedule A, by excepting therefrom crayons including charcoal crayons or fusains; by amending paragraph 15, Schedule A, by taking out of that section all other than chalk precipitated suitable for medicinal or toilet purposes, and by preparing a new paragraph to follow paragraph 15, Schedule A, combining these crayon, chalk and chalk crayon products as above described, and place thereon a duty of 60 per cent ad valorem.

REASONS FOR RECOMMENDATION.

Owing to the low cost of production in Germany, Austria, Japan, France, and Italy by reason of labor as well as the high degree of combination allowed concerns in these countries with regard to foreign trade, a duty, such as the one here asked for, is necessary to protect the industry of this country against invasion of this market by products from these countries, at least until present unfavorable exchange rates more nearly approach normal.

Mexico has recently entered this industry and is just offering its goods in this market and inasmuch as it uses Japanese labor, it will be difficult for the American industry to compete unless protected.

IMPORTANCE OF THE INDUSTRY.

Capital employed directly, approximately $4,500,000. Indirectly in the manufacture of wooden cases, wooden boxes, paper cartons, chalk, gypsum, wax, colors, and other raw materials, approximately $4,000,000.

The chalk crayon industry as applied to educational uses is of long standing in this country, and American industry has ably and adequately supplied this trade in the past and is fully equipped and able to do so in the future. Particularly in this line it would seem that foreign influences should not be allowed to creep in. With regard to the various industrial uses to which crayon and chalk can be placed, such as various markets in the lumber and glass business, transportation, etc., are of more recent development, and this business having been initiated by American concerns, is yet in its infancy and should be protected, so that it may reach the high development necessary with the ever-increasing development of these industries.

DEVELOPMENT AND FUTURE PROSPECTS.

As previously said, the industrial field for specialized marking crayons and chalk has but been recently opened up, and the various lines and uses made of these products during recent years assures an unlimited expansion in this respect. So far as applied to educational and toy uses, the expansion is, of course, limited by the expansion of our educational system and must go hand in hand with it, and as it has become a matter of general information that this system must be broadened and brought to a higher standard of efficiency, it means that the chalk and crayon industry which furnish the tools which the educational system in a large part uses must be in a position to go forward and fill the increasing demands. The industry now has an output of about $4,000,000 annually, and this is continually increasing and will increase with the various demands made upon it.

Number of employees affected: Directly, approximately 1,500; indirectly, approximately 3,000.

DOMESTIC COSTS AND WAGES AND COSTS AND WAGES IN FOREIGN COUNTRIES.

Owing to the state of war, it is impossible to procure data from the Central European Powers. The transfer of labor from nonessential to essential war industries makes it impossible to get this data from France, Italy, or Japan. The newness of the enterprise in Mexico likewise makes this data unavailable from there, but from all these countries their various lines have been offered in this country at from 35 to 50 per cent less than the American cost of manufacture.

Japan.—A considerable quantity of the cheaper grades of chalk and crayon, principally in the toy industry, are being imported from Japan. The prices quoted are considerably less than the prices American firms are able to quote their cheapest products. This is owing directly to the low cost of labor in Japan and possibly indirectly to the high state of organization allowed various Japanese industries in their foreign trade and possibly to some Government aid given these industries so far as foreign commerce is concerned.

Mexico.—The Mexican industry is manned by Japanese labor and it is probable that all stated above with regard to Japan applies with equal force to the Mexican industry.

Germany and Austria.—These countries have quoted their products in the American market at from 30 to 50 per cent below our cost of manufacture. The cost of labor and cost of raw materials and more particularly the exchange makes this possible.

France and Italy.—France principally imports tailor's chalk and wax chalk; Italy, billiard chalk. The low cost of labor as well as the unfavorable exchange and the high degree of organization allowed between these countries so far as their foreign trade is concerned permit the offering of their goods in American markets at less than the actual cost of manufacture in this country.

SUGGESTIONS AS TO CHANGES IN PHRASEOLOGY OR CLASSIFICATION.

The following changes are respectfully recommended:

That paragraph 367, Schedule N, be amended to read as follows:

> Manufactures of amber, asbestos, bladders or wax, or of which these substances or any of them is a component material of chief value, not especially provided for in this section, excepting crayons, chalk, and chalk crayons in their various industrial, educational, and toy forms, —— per centum ad valorem; yarn and woven fabrics composed wholly or in chief value of asbestos, —— per cent ad valorem.

Paragraph 69, Schedule A, be amended to read as follows:

> Talcum, ground talc, steatite, and French chalk, cut, powdered, washed or pulverized, except chalk in stick or crayon form, for industrial, educational, or toy uses, not otherwise specified, —— per cent ad valorem.

That paragraph 63, Schedule A, be amended to read as follows:

> Enamel paints and all paints, colors, pigments, stains, smalts, and frostings, and all ceramic and glass fluxes, glazes, enamels, and colors, whether crude, dry, mixed, or ground with water or oil, or with solutions other than oil, excepting paints, colors, and pigments, known as artists, educational, school, or toy paints or colors, whether crude, dry, mixed or ground with water or oil, or with solutions other than oil, not especially provided for in this section, —— per cent ad valorem; all color lakes, whether dry or in pulp, not especially provided for in this section, —— per cent ad valorem.

That paragraph 15, Schedule A, be amended to read as follows:

Chalk precipitated suitable for medicinal or toilet purposes, —— per cent ad valorem.

That a new paragraph be inserted immediately following paragraph 15, Schedule A, reading as follows:

Crayons, including gypsum, wax, pastel, pressed, charcoal, fusains, and other combinations of waxed and mineral bases, such as lumber and metal workers, glass marking, upholstering and other forms of crayons, in white or colors, for industrial, educational, and toy use, and chalk crayons and chalk, whether in cubes, blocks, sticks, disks, or otherwise, including red, tailor's billiard, railroad, carpenter's, blackboard, and other forms of chalk, in white or colors, for industrial, educational, and toy use, and all other manufactures of crayons or chalk for industrial educational, or toy use not specifically provided for in this section, 60 per cent ad valorem.

THE STANDARD CRAYON MANUFACTURING CO.
THE MILTON BRADLEY CO.
THE BINNEY & SMITH CO.
THE AMERICAN CRAYON CO.

POTASH.

[Paragraphs 64 and 580.]

E. M. SERGEANT, VICE PRESIDENT OF THE NIAGARA ALKALI CO.

Mr. SERGEANT. We recommend the inclusion in paragraph 64, which now imposes a duty on various refined potash salts, of caustic potash, which is now free, caustic potash and cyanide of potash, which are the only refined potash salts which are not dutiable under the present laws, and as to the amount of the duty, we are suggesting 3 cents a pound on caustic potash. The reason for that is that it is approximately 15 per cent ad valorem on the present price, which seems to be fairly reasonable amount, and while it is difficult to arrive at a proper specific duty under present conditions, we think it is advisable to suggest that rather than an ad valorem duty on account of obvious advantages, even though it may not be absolutely the exact figure, although it seems to us that that is about the exact figure, and is about in line with the present rate on other refined potash salts.

The CHAIRMAN. Do you suggest the amount of the specific duty in your statement?

Mr. SERGEANT. Yes, sir; 3 cents per pound as the specific duty.

The CHAIRMAN. All right.

Mr. SERGEANT. Furthermore, the raw material used in manufacturing caustic potash is now free, and should that be made dutiable under any new law it would be necessary, to equalize things, for an additional duty to be imposed on caustic potash. The duty of 3 cents per pound which is proposed would not come anywhere near equalizing the advantage of the foreign manufacturer, the imports coming entirely, or practically entirely, from Germany, under the present conditions. It would simply be a source of revenue, and it would be a help, but it would not equalize the advantage which the present exchange gives to the German manufacturer.

Mr. RAINEY. It would be 50 per cent more than the Payne-Aldrich tax?

Mr. SERGEANT. I think there was no duty on caustic potash under the Payne-Aldrich act.

Mr. RAINEY. I thought it was 6 cents a pound?

Mr. SERGEANT. I think not.

Mr. RAINEY. Then it is free under the Payne-Aldrich act?

Mr. SERGEANT. Yes, except for the refined, which is a very small amount of the consumption.

As to the justification of any duty at all, the caustic potash industry is not a large industry.

Mr. RAINEY. How many men does it employ?

Mr. SERGEANT. Oh, it is very small. We are not urging it on that basis. Our total force is about 300 men, but not by any means are all of those engaged in caustic potash production. Altogether, it would not be a large factor, but the caustic potash industry furnishes the raw material for other industries, and it enters largely into dyes. Also the caustic potash industry affords an outlet for the production of the potash manufacturers in this country, and on that account we believe that the continuance of the manufacture of caustic potash in this country is desirable.

The industry has been all along subject to very vigorous German competition. The German producers before the war attempted to undersell the American producers and made it very difficult. It got practically to a point where there was no profit left, and there seems to be no reason to suppose that that will not happen again. Also before the war the raw material was entirely imported, and the foreign manufacturers got better prices on their raw material than it was sold for in this country, so that they had a considerable advantage and will doubtless again have that advantage, and we feel that that ought to be equalized.

The CHAIRMAN. Is that all?

Mr. SERGEANT. Yes, sir; except that I would like to say also that we are also interested in the caustic soda and bleaching powder, and we agree in the recommendations on that which will be presented to you by Mr. Allen.

BRIEF OF NIAGARA ALKALI CO.

GENTLEMEN: We would recommend that paragraph 64, Schedule A, of the tariff act of 1913 be amended by inserting after the words "chromate and bichromate of, 1 cent per pound," the following: "hydrate of, or caustic potash, when containing not more than 15 per centum of caustic soda, 3 cents per pound," and that paragraph 580 be amended by striking out the words, "hydrate of, when not containing more than 15 per centum of caustic soda."

In support of this recommendation we would point out that the only refined potash salts not now dutiable are caustic potash and cyanide of potash. There seems to be no logical reason why these products should not be classed with other refined potash salts, and the rate suggested is believed to be in line with those on such other salts in the tariff act of 1909.

While recommending this duty as a source of revenue, and as affording some protection to the domestic producers, we wish to point out that at the present time the margin in favor of the foreign producers on account of the exchange situation is so great that they would still have an enormous advantage, and we concur in the recommendations of the Manufacturing Chemists' Association as to means of meeting this condition.

We wish also to emphasize particularly the fact that the ability of caustic potash manufacturers in this country to compete with the foreign producers depends almost entirely on the cost of their raw material, and should it be decided to impose any duty on muriate of potash, then a corresponding additional duty should be levied on caustic potash. Furthermore, since it requires about 2 pounds of 80 per cent muriate to produce 1 pound of high grade caustic, the additional duty on caustic should be at least twice that on muriate.

The consumption of caustic potash before the war was about 5,000 tons per annum, of which about 75 per cent was imported from Germany. The following table gives the production of the Niagara Alkali Co. for the years 1914 to 1920 inclusive:

	Tons.		Tons.
1914	3,252	1918	447
1915	2,673	1919	3,141
1916	392	1920	5,738
1917	764		

The importance of continuing the industry in this country lies not in its absolute volume, which while increasing will probably never be very great, but in providing a domestic source of supply of raw material for other industries, notably dyes; and in providing an outlet for the product of the domestic manufacturer of crude potash salts, thus tending to make the country less dependent on the European potash deposits. This phase of the matter appears to us of the greatest importance.

Present costs both here and abroad are so abnormal that it is believed to be useless to attemp to make any comparison.

Before the war the German manufacturers made vigorous efforts to put the Niagara Alkali Co. out of business, reducing their price from about 6 cents to less than 4 cents in the endeavor to do so. At the same time they were given more favorable prices for muriate of potash than we could obtain, this material coming at that time exclusively from Germany. With the advantage of exchange, they are now in a position to go much further in this direction.

Imports come almost exclusively from Germany.

The following table gives the volume for the years 1908 to 1918, inclusive.

	Pounds.		Pounds.
1908	5,941,219	1914	8,565,451
1909	7,041,657	1915	4,993,471
1910	8,785,491	1916	39,770
1911	7,426,402	1917	75,720
1912	8,422,007	1918	11,732
1913	8,994,449		

EDWIN M. ALLEN, OF THE MATHIESON ALKALI WORKS (INC.), NEW YORK CITY.

Mr. ALLEN. This is a brief covering the soda alkali group:

Bicarbonate of soda, or supercarbonate of, or saleratus, and other alkalies containing 50 per cent or more of bicarbonate of soda; hydrate of, or caustic, one-fourth cent per pound; crystal carbonate of, monohydrate, and sesquicarbonate of, sal soda and soda crystals, one-eighth cent per pound. (Par. 67 of schedule A, chemicals, oils, and paints, tariff act of Oct. 3, 1913, H. R. 3321.)

Bleaching powder, or chloride of lime, one-tenth cent per pound. (Par. 12 of schedule A, chemicals, oils, and paints, tariff act of Oct. 3, 1913, H. R. 3321.)

Soda ash, free. (Par. 605 of free list, act of 1913.)

We would recommend on the items named that the modest duties named in the tariff act quoted, namely, that of October 3, 1913, be continued without change, but that a like duty be imposed on soda ash from those countries which impose a duty on soda ash from the United States.

The rate has declined as follows:

On bicarbonate of soda, from 1¼ cents per pound in 1883 to one-fourth cent per pound in 1913; on caustic soda, from 1 cent per pound in 1883 to one-fourth cent per pound in 1913; on sal soda or soda crystals, from one fourth cent per pound in 1883 to one-eighth cent per pound in 1913; on bleaching powder, from one-fifth cent per pound in 1897 to one-tenth cent per pound in 1913.

While it is impossible at this time to compare costs of manufacture, involving raw material costs and labor costs as between this country and foreign producers, we believe that the war has augmented the difference in cost of manufacture, as between this country and foreign countries. American costs of manufacture at this time would not be a fair criterion, as they have increased to a point which can not be regarded as permanent or normal. The same is true of manufacturing costs abroad, and any comparison at this time would be a comparison of temporary values only.

We believe, however, that the same conditions which warranted the tariff rates named in the tariff act of October 3, 1913, will prevail again after normal industrial

conditions are resumed in the various producing countries, and that duties as existing represent no more than a fair measure of the difference of production cost between this country and foreign countries, that difference being ultimately traceable to higher wages paid for labor in this country.

The importance of our industry is so well known that it is unnecessary to emphasize it. It is one of the key chemical industries, and the alkalies named enter into a great majority of chemical processes. In addition caustic soda and bleaching powder are of primary importance in any national defense program. At the close of the war the military requirements took 40 per cent of the caustic soda production and practically all of the bleaching powder. Without the splendid development of the industry during the last two decades the country could not have met the demands made upon it.

The development of the industry under the various tariff acts from 1883 to 1913 has been pronounced and future prospects are unquestionably good. Particular emphasis may be laid on the splendid development of electrolytic processes, for the manufacture of caustic soda and bleaching powder through the utilization of water power, a development which has placed this country far in advance of foreign countries. The electrolytic industry, however, is facing increasing permanent costs owing to the advance in water-power rates, which promises to be permanent.

In advancing this petition for your consideration I have authority to speak not only on behalf of my own company, the Mathieson Alkali Works (Inc.), but on behalf of the Columbia Chemical Co., the Diamond Alkali Co., the Hooker Electrochemical Co., the Michigan Alkali Co., the Pennsylvania Salt Manufacturing Co., the Niagara Alkali Co., and the Solvay Process Co., all of which, at a meeting held for the purpose of discussing tariff legislation, unanimously agreed on the views which are herewith presented.

E. M. ALLEN,
President The Mathieson Alkali Works (Inc.).

I might add that this industry probably employs 25,000 to 30,000 men. It represents one of the largest tonnages of any chemical manufactured, probably 2,000,000 tons a year capacity of soda ash and probably 600,000 tons of caustic soda, possibly 150,000 tons of bleaching powder.

I might say that that Saltville plant that you were talking about is one of our plants in Virginia, and the other is at Niagara Falls.

Mr. LONGWORTH. Do both of them use the same process?

Mr. ALLEN. No. The Saltville, Va., process is a chemical-acid process, and the Niagara Falls is the hydroelectric.

Mr. RAINEY. Is it as successful as the other?

Mr. ALLEN. Yes, it is. They are different.

Mr. COPLEY. When was that Saltville plant completed?

Mr. ALLEN. That is entirely different from our plant. That is a Government plant that was built on our land in Saltville. They spent about $3,000,000.

Mr. COPLEY. Was the Government plant completed, Mr. Allen?

Mr. ALLEN. It was completed.

Mr. COPLEY. Did they ever make any product at that plant?

Mr. ALLEN. A little. It was not commercially worked. It sold for $225,000, and cost about $3,000,000.

Mr. RAINEY. Who bought it?

Mr. ALLEN. The Brushville Co., Pittsburgh.

Mr. RAINEY. Are they operating it?

Mr. ALLEN. They junked it. They bought it as junk.

H. W. KELLOGG, REPRESENTING THE NATIONAL ELECTROLYTIC CO., NIAGARA FALLS, N. Y.

Mr. KELLOGG. I have made some pencil notes. With your permission, I will present them in decent shape a little later for the clerk, filling the same in.

We are manufacturers of bichromate of soda and potash formaldehyde, chlorate of potash, and other products, but I wish to speak now of chlorate of potash. Prior to 1898 there was no chlorate manufactured in this country, all being imported from Germany and England. There was no duty. After securing protection through the tariff we started, in a small way, the first plant in this country.

Chlorate is used chiefly in making matches. It is also used in dyeing textiles, for tooth paste, and for drug and medicinal purposes, detonators and boosters for military uses, nothing having been found to take its place. During the late war we were called on by the Government to supply special grades of chlorate to the various arsenals, and we worked out special methods of purification of this article for particular purposes; also special grindings.

Chlorate is a dangerous material to manufacture and handle. Being an oxygen carrier, it is a great aid to combustion. It requires long experience to handle this safely. The tonnage required for military uses is not large, but it is indispensable. During the war Germany was unable to get nitrates for explosives and turned to chlorate and at the close of the war had capacity to manufacture 24,000 tons per annum, as against about 8,000 to 10,000 tons in this country. During the war there were importations from Japan in quite large quantities, but these have ceased now, as the price is so low, but large quantities are coming in weekly from Germany and being sold at considerably less than our cost of production after paying one-half cent per pound, the present duty.

The chief raw material is muriate of potash, and prior to the war Germany had a monopoly of this material. France now owns the Alsatian mines, but is unable to produce much more than they require, and Germany is now trying to make an agreement with France to hold up prices for export. Potash is being supplied to German users at about $20 per ton, but is being sold here at $100 per ton, which gives the German manufacturers an advantage of about 3 cents per pound on the cost of making chlorate due to the raw-material cost alone. I do not believe that potash can be produced in this country at less than $100 per ton, so there is no reason for Germany to sell it here at less.

It would seem as though we would have to have a duty on chlorate. In addition to the difference in the cost of manufacture here and abroad of about 1 cent per pound of chlorate for every $25 per ton difference in cost of potash here and in Germany. As to the difference in cost of manufacture here and in Germany, we estimate 2 cents per pound of chlorate, but if an ad valorem duty should be put on it would require about 25 per cent. This would reduce the duty per pound if cost of manufacture were reduced at any time in the future, or a combination of specific and ad valorem duties might be found to cover the matter better.

During the war we shut down part of our plant and the rest of the plant was subject to Government control. We sold chlorate only with their consent. It seems to us apart from financial reasons that this industry can not be allowed to die and make this country dependent on Germany, Japan, or any other foreign country for an absolute necessity in case of war. Our plant shut down January 1, with no prospects of starting up again.

Mr. GREEN. You used chlorate of potash?

Mr. KELLOGG. Yes, sir.

Mr. GREEN. The potash manufacturers of this country have been asking that a duty be placed on that. I do not know what they will do now. I suppose if a duty was put on that, you would have to have some compensating duty also, as well as this other duty, if you are going to operate?

Mr. KELLOGG. Well, if a duty was put on that to protect them, we probably would try to use the domestic potash, although we have not been able to use it as yet. It is very difficult for chemical manufacturers to use the domestic potash, on account of the borax, arsenic, and other things that are in it. Apparently it is all right for agriculture in dilute quantities, but not for chemical use. That, of course, would kill any export business that we might get later, if we had to pay——

Mr. MARTIN. I understood you to say your plant had shut down on January 1.

Mr. KELLOGG. Yes.

Mr. MARTIN. Do you know the present rate of the foreign?

Mr. KELLOGG. No; they are selling away below our cost.

Mr. MARTIN. What is the difference in cost and in the selling price between your price and theirs?

Mr. KELLOGG. We were selling from 12 to 15 cents. They were offering it at 8 cents. They were asking for bids. That is the way they handle it. They do not care to quote. They will sell at 8. If anybody will make them a firm offer they will sell at less. They will take anything they can get in American money at the present time.

Mr. MARTIN. When you say "they," whom do you mean?

Mr. KELLOGG. I mean the Germans. Of course, the Japanese are shut out on account of the price. They are not much in the way in figuring this because they are not to be relied upon. They make this in hundreds of small factories. If you want any quantity you have to buy in a great many places, and you would not get two factories which ran the same.

The CHAIRMAN. Do I understand you to say that you can not use American potash?

Mr. KELLOGG. We have not been able to yet. We have tried to purify it, but we have not been successful. We have occasionally had some that we could use, but, as a general rule it contains too much borax or too much arsenic. Our chemical is used a great deal in the drug business.

PAUL A. HERFURTH, SECRETARY BATTELLE & RENWICK CO., NEW YORK CITY.

Mr. HERFURTH. Paul A. Herfurth, secretary of Battelle & Renwick Co., New York City.

Mr. Chairman and gentlemen of the committee, we are interested in refined nitrate of potash, which is manufactured from nitrate soda and muriate potash.

One hundred pounds nitrate of soda and 100 pounds muriate of potash dissolved in water and boiled together in a kettle reacts and makes nitrate of potash in solution and refuse salt precipitated. This nitrate of potash liquor is run off into crystallizers, crystallized and

redissolved and recrystallized until such time as all impurities are eliminated, to comply with the U. S. P. and the B. A. I. requirements, which is determined by careful chemical analysis.

Our plant has been compelled to suspend the manufacture of converted refined nitrate potash, due to the fact that the German manufacturers have sold the material in New York at almost 4 cents per pound below our cost of production.

During the last three months of 1920 approximately 2,134,000 pounds have been received at the port of New York. Our letter to the committee gave the number of pounds as 1,098,520, but we have since learned of other importations which have increased this amount considerably.

We have at our plant enough manufactured material to supply the normal demand for three or four months and are compelled to store a large quantity of raw material in storage warehouses, and on account of the large amount of imported nitrate potash dumped on our market the indications are we will be unable to resume manufacturing for a long period.

Our present stock cost approximately $11.56 per hundred pounds and the cost of producing same at the present price of raw materials would be approximately $9.26 per 100 pounds. We know the German product has been sold at $7.50 per 100 pounds, cost, insurance, freight, and duty paid, landed in New York.

Owing to the offerings of imported materials we have been compelled to make sale at prices far below the price of production based on present prices of raw materials.

Our plant, employing normally 100 men, represents an investment of over $500,000, and unless we are sufficiently protected our industry which has taken over 50 years to build up, will have to be abandoned.

We respectfully request after consideration of the above facts that the committee increase the duty on refined nitrate potash from 35 cents per 100 pounds, present tariff (p. 64), to $3 per 100 pounds.

Mr. GREEN. What is your product used for? This is not what is known as nitrate of potash, that is saltpeter. That is a refined product?

Mr. HERFURTH. Our product is used for powder, gunpowder, fireworks; glassmakers use it and meat packers use it, some meat packers.

Mr. GREEN. This chemical is a pure, refined product?

Mr. HERFURTH. Yes, sir.

Mr. GREEN. Is it what is commonly spoken of as Chilean nitrate of potash?

Mr. HERFURTH. That is nitrate of soda. Ours is nitrate of potash made from nitrate and muriate.

Mr. GARNER. You say you want $3 per 100 pounds?

Mr. HERFURTH. Yes, sir.

Mr. GARNER. You want protection to the extent of exclusion?

Mr. HERFURTH. No; only enough to equalize the difference between the lower wage scale and exchange advantages of foreign competition—German, English, and Japanese.

Mr. GARNER. I understand that you want protection to the extent of exclusion.

Mr. HERFURTH. Yes, sir.

Mr. GARNER. You don't want any competition from abroad?

Mr. HERFURTH. We never did have any until the last three months.

Mr. GREEN. I beg to differ with my friends on the committee. In support of my statement the Tariff Board refers to that as nitrate of potash, listed on page 33, or saltpeter, and that we get largely from, in its crude form, Chile.

Mr. HERFURTH. That is nitrate of soda.

Mr. GREEN. Well, that is probably the correct name for it.

Dr. GRINNELL JONES of the Tariff Commission. That Chilean saltpeter is a different item.

Mr. GREEN. I do not question your statement about it.

Dr. GRINNELL JONES. That saltpeter is nitrate of soda.

Mr. HERFURTH. Chilean saltpeter is nitrate of soda.

WILBUR LA ROE, JR., REPRESENTING UNITED STATES POTASH PRODUCERS' ASSOCIATION, WASHINGTON, D. C.

Mr. LA ROE. If the committee please, I appear here this morning in behalf of the United States Potash Producers' Association, but I shall take only two or three minutes of your time.

I desire to make it clear to the committee that potash must be considered from two different points of view; first, from the point of view of the potash salts, which are used largely in the production of fertilizer, or fertilizer materials. These crude salts are now on the free list, and are not to be considered here to-day.

The schedule for consideration this morning is the matter of refined potash salts, which are not used at all in agriculture. We shall have one witness to testify very briefly about refined salts as distinguished from the crude salts used in agriculture.

We are striving earnestly to assemble adequate information in regard to the potash salts, for presentation to this committee when the free list comes up for consideration, and we should like to have the committee understand that the presentation here this morning does not in any sense relate to the crude potash salts used for agricultural purposes, or more properly speaking, used in the production of fertilizer.

I should like to say that when we present later the matter concerning crude potash salts, we shall not take a position which conflicts in any way with the interests of the producers of refined salts, but on the contrary the members of that industry are members of our association and we represent them, and we have been cooperating in every way we can with them, and we shall ask the committee to endeavor so far as practicable to consider the two matters together, although the hearings will be held at different times, in order that no legislation predicated upon the evidence which will be later submitted regarding crude salts may operate in any way to the disadvantage of the interests producing refined salts. Thank you.

R. NORRIS SHREVE, CHEMICAL DIRECTOR, EASTERN POTASH CORPORATION, NEW YORK CITY.

The CHAIRMAN. Please give your name and address and the business you represent to the reporter.

Mr. SHREVE. R. Norris Shreve, chemical director, Eastern Potash Corporation, 120 Broadway, New York.

I have a brief here, and I shall only read to the committee several paragraphs and give the committee such information as I may. The Eastern Potash Corporation is an American-owned company, organized to make potash compounds out of New Jersey greensands. We are building a plant which has already cost $1,750,000 to produce potash out of New Jersey greensands, and we shall produce refined salts also from this unusual raw material, which extends very extensively in the State of New Jersey. Just what the cost will be we are not yet able to say as the plant is not yet in operation, but we estimate our costs will probably be, for the production of caustic potash, about 10 cents per pound.

Now, gentlemen, the present market price as recently quoted in the magazines gives the price at 16 cents a pound, but the Germans last week offered 100 tons of caustic potash f. o. b. Hamburg for 7 cents a pound, which would be about 7¼ cents a pound at New York, and we know that even before the war they sold caustic potash as low as 3½ cents per pound f. o. b. New York.

And, on the basis of the figures that we can get at, we think that a duty of 3 cents a pound on caustic potash would be a fair differential to overcome the cost of manufacture here and abroad, and that, of course, ought to be added to whatever duty you gentlemen put upon crude salts used in the manufacture of the fabricated potash compounds when you consider these crude salts in your meeting in February.

Mr. LONGWORTH. Just what is greensand?

Mr. SHREVE. Greensands are known as glauconite, Mr. Longworth, and it is a sand which occurs very extensively in the State of New Jersey, extending from Atlantic Highlands across the State, paralleling the Pennsylvania Railroad about 30 miles wide. A report of the Geological Survey states that there is enough in New Jersey to supply the United States with all of the potash that would be required on a prewar basis for 2,000 years.

And this company, this Eastern Potash Corporation I represent, is now erecting a plant, a good-sized plant, and it has the plant almost equipped, and we expect to put it in operation some time during 1921, probably in the summer.

Mr. LONGWORTH. So that if you are successful commercially you could supply the country?

Mr. SHREVE. Except that this plant is only designed to produce 20,000 tons a year, which is about 10 per cent of the normal prewar consumption. Of course, if we are successful later other concerns will get into the business and erect plants, and the Geological Survey says that we have enough there to last for 2,000 years, and it is in reach of the steam shovel. There is only 5 or 10 feet of overburden above the sands. Those are very remarkable deposits right here in the eastern section of the United States, where we have cheap freight rates to the users of the potash.

Mr. HAWLEY. What percentage of potash will you get out of the crude material?

Mr. SHREVE. We expect 5 per cent of the weight of the greensand.

Mr. OLDFIELD. Does your company own all of the sand?

Mr. SHREVE. No, sir; it would be impossible, because it is a stretch entirely across the State diagonally from New Brunswick down to Trenton and beyond. In fact, it starts at Atlantic Highlands.

Mr. FREAR. What is the principal use of caustic potash?

Mr. SHREVE. The principal use of caustic potash—it is used in the manufacture of soap and other laundry preparations and chemicals. It is used throughout the United States.

We shall also make other products, other potash compounds, such as potassium nitrate, potassium carbonate, and potassium sulphate. We intend to manufacture those articles later on.

Mr. LONGWORTH. Could it be used as ordinary potash salts?

Mr. SHREVE. Yes, sir; it could be, but during the first few years in the starting of our plant we shall not be able to utilize all of our by-products and we will not develop our refining processes until later on. We are just starting in manufacturing this article from these greensands and during the beginning we will necessarily go cautiously.

Mr. GREEN. What is the origin of this?

Mr. SHREVE. You know that at one time all of southern New Jersey was under water, and these sands were deposited there at that time. They are just among those sand beds.

Mr. GARNER. In making your calculation for the rate of duty you are asking on this article did you take into consideration the possible reduction of your cost price during the next three or four years?

Mr. SHREVE. No; we have not because we do not expect to make very much money during the next three or four years, and four years from now we will probably be called on in connection with another revision of the tariff and will have to come down here before your committee and give you these figures. We have not taken that into consideration in making these estimates.

Mr. LONGWORTH. I think you have underestimated the term.

Mr. SHREVE. We can not tell just what the cost will be at that time.

Mr. BACHARACH. Your thought is that you want protection for the present, and your estimates are based on what you think it will cost to manufacture this article from these raw materials. The industry is not yet sufficiently developed in New Jersey so that you can tell what the cost will be for making this potash, so you want protection for the present in order to develop this new industry.

Mr. SHREVE. Yes. All we want is a fair production.

Mr. BACHARACH. The thought in the minds of the members on the other side from your remarks with regard to the four years is that you think their party will be in power four years from now.

Mr. SHREVE. Oh, no; nothing like that.

BRIEF OF THE EASTERN POTASH CORPORATION OF NEW JERSEY.

The Eastern Potash Corporation is an American-owned company, organized to make potash compounds out of New Jersey greensands. Its capitalization is $2,500,000 preferred, and $5,000,000 common stock. The company after a number of years experimenting on a large scale (10 tons raw material per day), and the expenditure of more than $400,000 for such experiments, designed and is now constructing their large plant on the Raritan River near New Brunswick, N. J. Already there has been actually spent $1,750,000, and contracts for a considerable part of the remaining equipment have been signed and are nearing completion. The plant will start in operation some time in 1921, probably in the summer, and will produce about 20,000 tons of potash each year. Comparing this plant with the German potash mines, the capitalization per ton of product is decidedly less in the case of the American company, as the capitalization of a German potash plant with the same capacity is about $2,500,000, which, however, provides for the simple mining and crystallization

of only the crude salts, while in case of the Eastern Potash Corporation refined salts will be produced. This company will afford employment to about 800 men in a new industry.

The process is a simple one, involving the heating for one hour at a temperature corresponding to 500 pounds steam pressure, of a slurry of about equal parts of greensand and lime, and five parts of water. The initial product is caustic potash, but it can easily be, and it will be, transformed into other important potash compounds; for example, potassium nitrate, potassium carbonate, potassium sulfate.

It is difficult to state just what costs will be, as the plant is not yet in operation. but we give herewith our estimate of the probable cost of producing our main product, caustic potash:

	Ton.
Greensand	$15.43
Limestone	48.90
Fuel oil	100.30
Net materials	164.63
Labor	18.52
Interest, overhead, depreciation, etc	28.15
Total cost for 1 ton	211.80
Total cost for 1 pound	0.1057

However. after some time has elapsed, and if the company is successful in developing markets for its residue in the form of brick, lime for stucco and plaster, and also lime for sour soils, then the above estimate may be considerably reduced.

The present market is very unsettled—no one knows what it is. The Germans are free to sell, and doubtless they will be willing to sell, for a time even below cost to stifle the new potash developments—such has been their past history. On caustic potash, published quotations are around 16 cents a pound, but the Germans have just offered 100 tons in New York at the price of 7 cents per pound f. o. b. Hamburg. Before the war, the Germans at times offered this article as low as 3½ cents f. o. b. New York—and that is the competition we may have to face in a fight.

We feel that the only thing to do is to protect this home industry in a fair way from foreign attacks. We can not get at accurate costs in Germany to even compare with our estimates. However, we feel that some tariff should be put on the crude salts on the basis of their K_2O content, and if this is done, a proportional duty should be put on the products ordinarily fabricated from these crudes, in accordance with the K_2O content of the further fabricated potash compounds, plus the differential excess cost of fabrication here in America.

We append a table herewith showing our ideas on this matter: (This table is based on assumption that a duty of 50 cents per unit or per 20 pounds of potash, K_2O, will be placed on crude potash salts.)

Name of potash compound fabricated from crude.	Amount of potash, K_2O, in 1 pound of pure compound.	Amount of potash, K_2O, in 1 pound of commercial compound.	Duty on 1 pound pure compound based on 2½ cents per 1 pound of K_2O therein.	Differential duty for fabricated compound.	Total duty.
			Cents.	*Cents.*	*Cents.*
Hydrate of potash, 90 per cent	0.8394	0.755	2.099	3	5.099
Potassium nitrate	.4658	.466	1.165	3	4.165
Potassium carbonate, refined, 85 per cent	.6816	.579	1.704	2	3.704

We are sorry that the circumstances of our company are such that we can not give more definite figures. The point we wish to impress upon the committee is that there are a number of potassium compounds which are ordinarily

further fabricated from the crude compounds that are used in fertilizer, and that if a duty is placed upon the potash compounds used in fertilizer, based upon their K_2O content, then a corresponding duty should be placed upon compounds fabricated therefrom based upon their K_2O content plus differential duty to take care of the added cost of fabricating here in America in comparison with abroad.

Some way ought to be devised to protect American industries from the very unusual and unfair competition that they are subjected to, due to the depreciation of foreign exchange. This might be effected by some blanket clause equalizing the exchange prevailing at time of importation with that prevailing normally.

LETTER OF VICTORY SPARKLER CO., ELKTON, MD.

We write you with reference to the recent hearings on the new tariff which have taken place before the Ways and Means Committee.

We note that certain manufacturers of chemicals for the fireworks industry are urging the advancement of duty on certain chemicals. We speak with particular reference to chlorate of potash, barium nitrate, and strontium nitrate. These materials are used in the fabrication of our production, and we are sincerely and earnestly opposed to duty on same being raised or advanced in any degree.

We respectfully place before you our protest. In addition to registering such protest, beg to advise that we are at present in a position to keep our factory operating on a fairly normal schedule, while other mills in our vicinity have been compelled to close. We make a very small margin of profit on our commodity, but, in consideration of the times, we make every effort to maintain our scale of salaries and wages sufficiently high, in order to keep our employees from deprivation or utter lack of employment in these trying times. We provide steady work to a very respectable class of people in this vicinity, and should we be compelled to close our factory for any reason it would work a considerable hardship, not only to this company, but to the employees, both men and women, who are depending on us for a living.

Considering the small profits we allow ourselves on our production and the fact that we would suffer a considerable permanent loss if the proposed increased duty goes into effect (probably we should be forced to cease manufacturing our line entirely), we beg to place this matter before you and respectfully ask that you give us your consideration in your attitude toward this matter.

We shall greatly appreciate any courtesies extended in this matter and sincerely trust we may rely upon your consideration and cooperation in the protection of our interests, which consideration will also cover the interests of all our employees.

Should you desire any further details in this connection we shall be pleased to furnish same. In the meantime, we beg to thank you in advance for your attention to our request.

J. B. DECKER, *Vice President*.

BRIEF OF CARUS CHEMICAL CO., LA SALLE, ILL.

We have your letter of January 5 and note with regret that we will be unable to appear before the chemical schedule hearings, which occurred on January 6, 7, and 8, but as suggested, we are inclosing herewith a brief showing the necessity for increasing duty on our product. We trust this brief will be considered when a new bill for a revision in tariffs is being drafted.

POTASSIUM PERMANGANATE.

We are interested in an increase of tariff covering imports of potassium permanganate. We recommend that the tariff be 25 cents per pound.

Potassium permanganate is a chemical made from potash and manganese dioxide. Its use lies in its oxydizing power. It is used extensively in the following: Manufacture of other chemicals; celluloid manufacture; bleaching sponges and various fabrics; in lithopone manufacture; in pharmaceutical preparations; in connection with formaldehyde in fumigation; in the purifying of petroleum oils, medicinal oils, ammonia, carbon dioxide, etc.; as a disinfectant; and as a stock and poultry remedy. As the chemical field in this country is developing, its consumption is being increased.

The permanganate industry was vital during the recent war, because from potassium permanganate other permanganates, such as calcium and sodium permanganate,

are made which are used in the gas masks by the chemical warfare department. The importance of the permanganate to the Chemical Warfare Service can be realized from the following, which is a copy of a letter addressed to the Tariff Commission by K. B. Blake, captain, Chemical Warfare Service:

"GENTLEMEN: Mr. Edward Carus, of the Carus Chemical Co., La Salle, Ill., has recently called to my attention the situation which is liable to occur in the market for sodium permanganate under postwar conditions.

"Formerly the larger part of the permanganate required by this country was imported from abroad, where conditions of manufacture were such that this material could be produced at a very low cost. Upon declaration of war it was naturally impossible for us to obtain this material from foreign sources, and in order to meet our local requirements it was necessary for us to build up an appreciable permanganate industry within the United States. During the period of the war we required for use in gas masks approximately 15,000 pounds of sodium permanganate per week, and if there is any resumption of hostilities in the near future, or at any future period, there will doubtless be equal require ents for this material.

"In view of these facts, it might be well to carry this matter in mind in considering the question of tariff to be placed on importations of such material."

During the war, we also supplied potassium permanganate to the American Red Cross and various chemical houses who made medicinal preparations and disinfectants.

The permanganate industry has been developed in this country during the war. Prior to this time, it was manufactured in Germany and Austria alone. Thus, at the outbreak of the war, this country could not obtain enough permanganate to meet all its requirements, and as the old stocks diminished, the price rose from 10 cents per pound to $4 per pound, and at this high figure very little could be had.

The manufacturing process is a very difficult one and can not be developed in a short time. When potassium permanganate was selling around $4 per pound, more than 20 different companies started its manufacture. At this time, imports came from Japan, and due to this Japanese competition, the market dropped below $1 per pound, and only two of the companies survived. This shows the necessity for protecting this new American industry and giving it a little time to develop. We believe that if protected adequately for a few years, this industry will develop to such an extent that further protection will then not be necessary.

Our present costs average between 50 cents and 60 cents per pound, and at the present time imported potassium permanganate is quoted around 39 cents c. i. f. New York per pound. In order to put the American industry on an equal footing with the foreign industry, it will be necessary to increase the tariff to 25 cents per pound. It must be remembered that Germany has the advantage of the potash deposits, nearness to the manganese mines, and also has had many years of experience to develop her process and machinery.

Due to the large consumption of potassium permanganate in Germany, they can manufacture potassium permanganate in large quantities and dump their surplus in the United States so as to keep this industry, which is so essential both in peace and war times, from being developed in other countries.

In addition to the advantages mentioned above, the present rate of foreign exchange makes it impossible for our American industry to compete unless we are protected sufficiently to equalize these disadvantages.

LESLIE G. GRAPER, *Secretary-Treasurer.*

CASTILE SOAP.

[Paragraph 66.]

GEORGE B. McCULLOUGH, OF GEORGE B. McCULLOUGH & CO., CHICAGO, ILL.

Mr. MCCULLOUGH. Mr. Chairman, the definition of castile soap in the United States Pharmacopœia, "soap prepared from olive oil and sodium hydroxide and containing not over 36 per cent of moisture."

Mr. HAWLEY. Is soap made of other materials sold as castile soap in this country?

Mr. MCCULLOUGH. Yes, sir.

Mr. HAWLEY. Is there any way in which the word "castile" can protect the article?

Mr. McCULLOUGH. Absolutely, sir. That is up to the Agricultural Department. Of course, in these unusual conditions they are forced to be very lenient.

Mr. HAWLEY. These imitations have been sold in the nature of a fraud on the consumer?

Mr. McCULLOUGH. Well, yes; and yet at the same time castile soap was a mighty hard thing to get during the war, and they were simply forced to use something else.

Mr. BACHARACH. You export a good deal of castile soap, do you not?

Mr. McCULLOUGH. Oh, no.

Mr. BACHARACH. A great deal is exported by this country?

Mr. McCULLOUGH. No. There might be a great deal of imitation soap exported. There is no true soap, of course.

Mr. GREEN. We exported nearly $10,000,000 worth in 1918.

Mr. BACHARACH. $9,140,000 worth.

Mr. GREEN. I do not remember the precise figures, but it was nearly $10,000,000.

Mr. McCULLOUGH. I expect so, but it was not castile soap, sir, or at least it was not U. S. P.

(Thereupon Mr. McCullough read the following prepared statement:)

GENTLEMEN: *Definition.*—Castile soap, United States Pharmacopœia, "Soap prepared from olive oil and sodium hydroxide and containing not over 36 per cent of moisture."

Importations—

Year ending June 30—	Pounds.	Valuation.	Duty collected.
1912	5,034,504	$368,460	$92,93[illegible]
1913	4,656,364	357,868	88,20[illegible]
1914	4,678,278	397,118	43,456
1915	4,057,921	341,107	34,110
1916	3,245,550	335,580	32,858

Consumption.—In addition to the above, prior to 1914, there was a very large amount of true castile soap manufactured in this country, since the price of olive oil has been prohibitive, this supply has disappeared although there is a very large volume of imitation castile soap, soap made from cheaper vegetable oils and made in America.

History.—Castile soap has been imported into the United States since its infancy and as it is the only hard soap mentioned in the Pharmacopœia it is the acknowledged standard of this country.

Castile soap has been manufactured in all of the countries bordering on the Mediterranean, but Italy and France had, prior to the war, exported by far the greater amount.

Commercial or technical olive oil, known to the trade as Malaga yellow olive oil, is the basis of castile soap, and, prior to the war, this product was controlled by the merchants of Marseille, France, although the major portion originated in Spain; France, Italy, Greece, Asia Minor, and the northern countries of Africa furnished an appreciable amount. Prior to 1916 California produced a small amount of technical olive oil and was increasing the amount rapidly, but the abnormal prices following the war diverted this oil for edible or other purposes.

When France entered the war, she lost this controlling position, while Spain, being unaffected, took her place and the following condition resulted:

Being absolutely in control of the technical olive-oil market, Spain used her position to protect and encourage the soap manufacturers in Spain by placing embargoes on the olive oil and permitting castile soap to be exported freely, which policy has practically eliminated French and Italian castile soap and has placed the American manufacturer in a position where he was forced to shut down or operate at a loss.

Costs.—One hundred pounds of olive oil, together with 10 pounds of sodium hydroxide (commercial caustic soda), will produce about 150 pounds of castile soap.

100 pounds (13½ gallons) of olive oil, at $3.25 per gallon	$43.33
10 pounds of caustic soda, at 3½ cents per pound	.35
40 pounds of water	.00
150 pounds of castile soap will cost	43.68

Or approximately $0.29 per pound.

Attached you find a copy of a quotation on Spanish olive oil at $3.25 per gallon, f. o. b. New York, and an invoice for 5,000 pounds of imported Spanish castile soap, United States Pharmacopœia, at $0.22 per pound f. o. b. New York.

Using the above figures as a basis, it will cost the American manufacturer in New York, 29 cents per pound to produce castile soap, United States Pharmacopœia, without considering labor, overhead, or factory expense, while the imported Spanish product can be purchsed at 22 cents per pound f. o. b. New York, and this price naturally includes a manufacturer's and importer's profit and the present duty of 1 cent per pound.

Analyzing the above figures, through the manipulation of the olive-oil market, the American manufacturer is forced to pay $3.25 per gallon while the Spanish manufacturer purchases his olive oil at about $1.50 per gallon. Prior to 1914 technical olive oil was purchased at about $0.75 per gallon f. o. b. New York, while edible olive oil was worth about $1.75 per gallon. For the past three years the market on the technical and edible olive oil has been about the same price, showing clearly the manipulation of the olive-oil market for the benefit of the European castile soap maker.

Labor.—Packing castile soap in the usual rough manner, labor amounts to about 15 per cent of the total costs, but packing the soap in the more modern manner in individual packages the labor increases 5 per cent and the packages another 5 per cent.

Suggestions.—The writer believes that the American manufacturer of castile soap should be protected by a direct duty of at least 8 cents per pound, believing that a protective tariff of this amount will prevent European source from controlling both the raw material and finished product at unreasonable figures.

H. E. & J. O. MOORE CORPORATION,
Chicago, October 28, 1920.

GENTLEMEN: We are in receipt of an offer from our shippers for olive oil, suitable for the manufacture of castile soap in lots of from 10 to 200 barrels for November shipment from Spain at $3.25 a gallon of 7½ pounds. The price is net cash f. o. b. New York, sight draft with documents. This is for 5 per cent commercial olive oil, bright yellow Malaga.

As you know there is a semiembargo for oil from Spain to this country. However, here are some small lots offered and if you should be able to accept this offer, we shall be pleased to cable for confirmation.

J. O. MOORE, *Vice President.*

Mr. HAWLEY. We have had some testimony regarding wages in several countries, but none has been presented yet regarding wages paid in Spain. Have you any information on the wages paid in Spain?

Mr. MCCULLOUGH. I have not. I am under the impression they are rather high over there.

Mr. GREEN. I would like to correct my figures. The figures that I gave you were for all toilet soaps exported, including castile soap.

Mr. MCCULLOUGH. Yes, sir; I expect so.

Mr. GREEN. I had not the tariff report before me at the time.

Mr. MCCULLOUGH. Yes; that is a toilet-soap proposition.

Mr. BACHARACH. The statement shown in the book which has been prepared for the committee by the Tariff Commission is, "Imports have been valued at less than $850,000." And that, I presume, is for the year, 1919. "About 50 per cent of the imports is castile

soap." So there is only $25,000 of castile soap brought into the country.

Mr. GREEN. Is this soap made from olive oil better really than that made from any other kind of vegetable oil?

Mr. MCCULLOUGH. Well, the theory of the art of soap making, and it is only a theory, is that the soda does the cleansing and the oil furnishes the lubricant. In other words, soap of any kind breaks up into its component parts when it is dissolved in water. Therefore it is simply a question, to my mind, whether olive oil makes a better piece of soap than coconut oil or vegetable oil or animal fat.

Mr. GREEN. It commands a higher price?

Mr. MCCULLOUGH. Yes; unquestionably.

Mr. GREEN. Do you have any brief that you wish to file now?

Mr. MCCULLOUGH. Yes, sir; I gave it to the gentleman.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

Castile soap, which is made from low-grade olive oil or olive foots, and, because of certain features, used in lieu of other soaps for many purposes, should be considered to a notable extent a raw material, finding use in the silk and other textile industries. In the manufacture of this article fuel and chemicals represent, more perhaps than labor, the chief items of cost, and American manufacturers from this standpoint are in an advantageous position. As this article is patronized by a numerous class of our population of limited means, who prefer it to other soaps through traditional use, it should be maintained within easy reach of same, by avoiding increase of fiscal taxation, that would in the end have to be paid by the consumer, without benefit to the American manufacturer, as the limited raw material available for the manufacture of soap of this kind would not enable the latter to increase their output.

This chamber, therefore, respectfully recommends that the present rate of 10 per cent on castile soap remain unchonged.

BRIEF OF LOCKWOOD, BRACKETT & CO., BOSTON, MASS.

As one of the leading importers of castile soap we respectfully submit herein a brief, protesting against a suggested increase in import duty on castile soap from the present rate of 10 per centum ad valorem. Mature reflection and keen insight should be applied to the reasons behind any agitation for increase, which should not take effect because:

1. The American manufacturer is amply protected. The duty in effect for many years prior to the Underwood bill was 1½ cents per pound. When the change to 10 per cent was made in the Underwood bill domestic castile soap constantly undersold imported castile soap.

2. American ingenuity intelligently applied to volume production, compared to foreign methods, has more than offset any labor considerations, eliminating this feature entirely.

3. Imported Spanish castile soap as an article of manufacture is not comparable to domestic castile soaps because of reasons having to do with soil and climatic conditions and geographic location with relation to raw materials. From the early centuries castile soap has been a natural product of the skilled Castilian workman, produced in the Castilian Kingdom, from which it derives its name. The direct comparison with the domestic article does not exist, as the two products are fundamentally different.

4. Imported castile soap is necessarily sold in this market at an extremely close net profit to-day, due to competition with American-made soaps.

5. Increases such as were suggested at your hearing on January 7, 1921, would mean increased duty charges of from 300 to 400 per cent, the prohibitive charge of 2 cents on each 4-ounce cake, resulting in (*a*) driving American importers out of business; (*b*) cutting off supplies on a necessary article which can not be successfully imitated in this country as explained above; and (*c*) depriving the Government of present revenues, thus defeating an important aim.

6. The unprecedented temporary low level of Spanish foreign exchange amply explains the present temporary fair level of prices. Only a partial return to normal

exchange rates will enable the domestic manufacturer to produce for prices much lower than that of the imported article.

7. A clearly temporary low rate of exchange is not a valid reason for increasing the duty.

8. Imported castile soap is a necessary raw material commodity, used in large quantities in the production of articles in America wherein much American labor is employed.

9. Such increase would radically advance commodity price levels when the universal effort is to depress prices.

10. The chief uses for genuine imported castile soap are among mothers, infants, hospitals. The large mass of consumers are among the classes who are striving to procure necessities at lower prices. An increased duty would necessitate advanced prices and proportionate suffering.

11. The theory of remedying domestic manufacturing weaknesses by fostering an industry with an unwarranted protection is a delusion. An increased duty as a panacea in this case would be basicly wrong.

12. The two-page advertisement of a leading domestic soap manufacturer, dated January 1, 1921, and costing some $12,000 attached hereto, reading, "Every mother will find in ——— soap the natural successor of the genuine old imported castile soap, now so difficult to obtain," reveals and confirms not only that imported castile soap is not considered a formidable competitor of the American soap industry to-day, but clearly indicates the desire to erect an unreasonable barrier on general principles and for generally selfish reasons. The aim is obviously not to cultivate nor encourage the domestic manufacture of castile soap.

13. The chief aim of the supporters of suggested increases is to eliminate castile soap from the field.

14. A change in the tariff on castile soap is uncalled for.

T. R. LOCKWOOD, *Treasurer.*

LETTER FROM THE SPANISH EMBASSY.

DEPARTMENT OF STATE,
Washington, February 1, 1921.

SIR: I have the honor to transmit herewith copies of two letters received by this department from the ambassador of Spain, one of which adverts to a brief already transmitted to the Ways and Means Committee by Lockwood Brackett Co.

(Signed) BAINBRIDGE COLBY.

EMBASSY OF SPAIN,
Washington, D. C., January 17, 1921.

MY DEAR MR. SECRETARY: I inclose copy of a brief addressed by Messrs. Lockwood & Bracket Co., Boston, Mass., to the chairman of the Ways and Means Committee, protesting against the very large increase in the duty on imported castile soap in the tariff bill at present before the committee.

As castile soap is an important product of Spain, which has hitherto met with a favorable reception in the market of the United States, I feel justified in requesting you to interpose your good offices with the Ways and Means Committee in the House of Representatives in the hope that the proposed increase in the duty on this article may not be adopted.

(Signed) JUAN RIANO.

[Translation.]

MR. SECRETARY: By order of my Government, I have the honor to apply to your excellency and to ask that you will kindly use your good offices in the proper quarter in order that if Congress should raise the duty on castile soap, as asked by soap manufacturers in the United States, the increase should not apply to the genuine article made in Spain, or at least that which is used by the sanatoriums and hospitals of this country.

I shall be truly thankful to your excellency if you will recommend my request, to which I hope you will grant the support it deserves.

(Signed) JUAN RIANO.

Hon. NORMAN H. DAVIS,
Acting Secretary of State.

Mr. TREADWAY. Mr. Chairman, I am requested to file the following brief relative to paragraph 70, Schedule A:

SUPPLEMENTAL BRIEF OF LOCKWOOD BRACKETT CO., BOSTON, MASS.

Supplementary to a brief dated January 8, 1921, we file this additional matter with direct reference to statements made to your committee during the hearing on January 7, 1921, and the written statement submitted at that time.

1. (*a*) We confirm the fact that the word "castile" has been applied by American manufacturers to soaps not complying with the required standard as to raw material constituents.

(*b*) 'Castile soap," in the opinion of the Bureau of Chemistry, United States Department of Agriculture, while an item in the United States Pharmacopœia does not always come, with reference to violations, within the scope or jurisdiction of that bureau (when classed as a commodity).

(*c*) The Federal Trade Commission, recognizing the jurisdiction is investigating the matter of fraudulently labeled "Castile soaps."

2. The figures on importation of castile soap are given for the years ending June 30, 1916, only. The figures on imports for the years following:

1917	pounds..	2,428,993
1918	do....	1,016,399
1919	do....	1,492,221
1920 (first 6 months)	do....	1,413,632

would indicate very marked decrease in imports, even for 1919 and 1920.

3. Since Spain is the olive oil country of the world, it is most naturally consistent with her development that her exports of castile soap have increased.

4. We submit that the increased imports of Spanish castile soap are due to no other factor so much as to large amounts of money expended by American houses for advertising, sales forces, etc., to increase sales of the article as a household necessity of merit.

5. (*a*) The embargo by Spain against export of olive oil was made clearly to restrict exportation of an essential home product and not to protect Spanish soap makers.

(*b*) On the release for export by permit of olive oil for foreign needs Spain imposed an export duty on castile soap precisely as she imposed such a duty on olive oil.

6. (*a*) The figure $3.25 per gallon submitted as to the cost of olive oil, dated October 28, 1920, is not applicable in present market. The present figure is more fairly $2.25 with a weak tendency, a great difference.

(*b*) Olive oil for soap making being admitted free of duty the domestic cost of production will be easily seen to be well under the present market quotations of 26 cents to 30 cents on pure imported castile soap for full-weight delivered pounds.

(*c*) Mention of the import duty as "1 cent per pound" grossly understates the 10 per cent ad valorem.

7. The difficulties attending the American manufacturer in procuring olive oil for soap making here have also been experienced by soap makers in Spain. The high prices which have ruled have been due to scarcity, or the inexorable law of supply and demand. All commercial forces are cooperating abroad as well as here to bring about lower prices.

8. The question of cost and sale price comparisons between domestic and Spanish manufacturers are easily settled in the course of trading and commerce. American manufacturers have advantages in volume production, but the product of the Castilian Kingdom has recognized merit, due to a natural skill and inherent intuitive ability for natural reasons.

9. Since January 8 large numbers of pharmacists, manufacturers, druggists, and merchants throughout the country have requested us to protest against any increase on the grounds that:

(*a*) Imported castile is the leading soap for infants' and children's use.
(*b*) Domestic industry is sufficiently protected.
(*c*) American manufacturers can not successfully imitate the imported.
(*d*) Increase would result in undesired advanced prices.
(*e*) Imported castile is a necessity to all classes, not a luxury.
(*f*) Universal preference is for imported for practical reasons, not a whim.
(*g*) Would result in undue profit to domestic soap makers.
(*h*) Such action would unduly tax sanitation, child life, and hospital necessities.

This data, just received, when correlated, will soon be supplied to you as an exhibit.

11. (*a*) From the nearest estimates procurable imports of castile soap are approxi-

mately one-tenth of 1 per cent of the domestic hard soap production and approximately 1 per cent of the domestic toilet soap production.

(*b*) While imported castile soap is a necessary article, the preponderant competition of American soaps of lower cost makes an increase in duty an unreasonable and prohibitive burden.

T. R. LOCKWOOD, *Treasurer.*

NITRITE OF SODA.

[Paragraph 67.]

C. F. GRAFF, OF THE AMERICAN NITROGEN PRODUCTS CO., SEATTLE, WASH.

Mr. GRAFF. Mr. Chairman, I have divided my brief into four paragraphs. The first deals with a brief description of the products. The second consists of a reference to our operations in the West. The third contains some remarks as to the proper revision of the tariff from our standpoint, and the fourth gives our specific request. I think I can read it in the allotted time [reading]:

GENTLEMEN: 1. The American Nitrogen Products Co., of Seattle, Wash., for the reasons stated below, respectfully requests a revision upwards of the existing duty of one-half cent per pound on the chemical nitrite of soda, or sodium nitrite. At the outset we wish to emphasize to the committee the distinction between nitrite of soda and nitrate of soda.

Mr. GRAFF. I have here, Mr. Chairman, a small sample of nitrite of soda.

Mr. GREEN. What is the difference between nitrite of soda and nitrate of soda?

Mr. GRAFF. It is a chemical difference. The nitrate of soda is the nitrate imported from Chile and has an extra atom of oxygen over and above the nitrite. It is a chemical difference. This is a high-grade chemical, whereas the nitrate from Chile is really a fertilizer, a lower grade of material.

The former—that is, the nitrite of soda, which is our primary and practically only manufactured product—is a chemical used almost entirely by the dyestuffs manufacturers, a smaller portion being consumed by producers of prints, inks, rubber, and textiles. Nitrate of soda, otherwise known as Chile saltpeter, is the well-known soda nitrate imported into the United States and, prior to the war, into practically every large country of the world in enormous quantities from Chile. This commodity is absolutely essential to a nation which has not engaged in the extraction of nitrogen from the atmosphere, as it furnishes the only known source for the manufacture of nitric acid, so essential to the manufacture of explosives. The need for it is, therefore, vital in time of war to a nation which has not developed an air nitrate industry. In time of peace it is almost equally needed by such a nation as a fertilizer and its use as such has heretofore overshadowed any other material for this purpose. In order to convey to the committee an idea as to the magnitude of this Chilean nitrate industry, we record the fact that a total of 2,787,000 metric tons nitrate of soda, valued at nearly $360,000,000 on the world's markets, was exported from Chile in 1917; 1,500,000 of this came to the United States, on which we paid the Chilean Government an export tax of about $18,750,000. This material enters the United States free of duty, and on account of its great importance to this country, until the methods for extracting nitrogen from the air have been further developed and air nitrate plants have been established or expanded to a large scale, such as now already accomplished in Germany, Norway, and other European countries, no duty is necessary or demanded.

Mr. LONGWORTH. What is the Chilean nitrate worth to-day?

Mr. GRAFF. To-day it is worth about $60 per short ton, or 3 cents per pound.

Mr. LONGWORTH. What was the highest price it reached?

Mr. GRAFF. About 5 cents per pound.

Mr. OLDFIELD. How much a ton?

Mr. GRAFF. $100 per short ton.

Mr. LONGWORTH. What was the average prewar price?

Mr. GRAFF. About $50 per ton, or 2½ cents per pound.

Mr. LONGWORTH. So that to day it is about down to the prewar price?

Mr. GRAFF. It has gone very nearly down to the prewar price; within 20 or 25 per cent, I would say. I come to that right here, Mr. Longworth, in my brief.

The prewar United States sales price, c. i. f. Atlantic or Pacific coasts, on Chilean nitrate, was about 2¾ cents per pound and war price about 5 cents. As distinguished from Chilean nitrate our product, nitrite of soda, commanded a prewar United States sales price, c. i. f. Atlantic coast, of about 6 cents per pound, and the war price ranged from 15 to 60 cents. No fair present market value exists, on account of liquidation. The prewar annual consumption in this country was about 2,500 short tons, practically all of which was imported, and the present rate of consumption is perhaps 5,000 tons, of course not at this moment, on account of the temporary stagnation This great increase in tonnage and phenomenal rise in price was caused by the fact that, prior to the war, nitrite of soda was secured almost exclusively by importation from the large air nitrate works in Norway and Germany, where it was, and still is, made very cheaply from atmospheric nitrogen. When importation of dyestuffs into this country was cut off by the war, imports of nitrite of soda also ceased, and our dye manufacturers found themselves without adequate supply. As this product is basic to a very large and important class of colors, namely, whatis known as the azo group, the result was indeed serious. In other words, the dyestuffs manufacturers, through being confronted with this unusal situation, were sharply brought to realize that their industry was not a safe and self-contained American industry without American production of nitrite of soda on a scale suffiicient to at least approximately take care of domestic dyestuffs manufacture. This corporation claims that it has very materially aided in alleviationg this difficult situation.

Mr. GREEN. Are you manufacturing from nitrate taken from the air?

Mr. GRAFF. Yes, sir.

Mr. GREEN. What process do you use?

Mr. GRAFF. I will come to that just now.

2. The American Nitrogen Products Co., incorporated under the laws of the State of Washington for the development of an American air nitrate industry, began the erection of a plant at La Grande, Wash., in 1917, utilizing the electric arc process for which hydroelectric energy is employed. This plant was designed and installed for the manufacture of nitrite of soda and began producing in the same year. The enormous expansion of the dyestuffs industry in America during the war and consequent growing demand for nitrite of soda, coupled with the great and continued scarcity of supply caused by the above-referred-to situation, necessitated further expansion in 1918, but because of limitations as to supply of electric power we were compelled to build this additional factory at or near Vancouver, British Columbia, Canada, the only location where power was then available at the required low rate. Both of these plants produce nitrite of soda exclusively and all of the production from both plants is consumed in the United States. None of our product is used in Canada and none is manufactured there except our own to the best of our knowledge. During the latter part of the war we furnished the major portion of the American demand for the product, but are now seriously threatened by foreign competition and dumping, as referred to later. The quality of our product is unsurpassed, averaging 98 to 99 per cent pure, and it is generally preferred in every way over the imported article by the dye manufacturers. Our enterprise has been initiated and developed to its present state on the theory that an electric arc nitrate plant can be made a commercial success in this country where sufficiently cheap power is available. In other parts of the country, or of the world, other processes may, and probably are, better adapted and more economic. Our confidence in the process is, of course, based upon our own investigation and knowledge, but we support our belief in the arc method by reference to the final report of the nitrogen products committee of

Great Britain, where, after full investigation of known air nitrogen processes, it is concluded—

"That at a really favorable water-power site, nitric and nitrate nitrogen can be produced more cheaply by the arc process than by any other method."

Such also was the conclusion arrived at by our own Government through its air nitrate division, as a result of an exhaustive investigation of the subject and the report thereon in 1916. The primary requisite for the process is, therefore, cheap hydro-electric power, of which there is an abundance in the Western and Pacific Coast States of this country. The air nitrate industry, built up on cheap electric power, can be expanded to enormous proportions in this country and become a valuable asset in time of war or peace. It is this company's hope and purpose to expand and manufacture other useful and essential nitrogen products in the future. To date we have invested something over three-quarters of a million dollars. To the best of our knowledge we have established and are commercially operating the only electric arc air nitrate plant on American soil. We have done this thing entirely through the investment of private capital and through enormous expenditure of effort and research and in the face of great difficulties, and we have never asked or received any financial or other assistance from the Government. Every large civilized nation now recognizes the necessity for and the importance of the air nitrogen industry, enabling absolute independence of Chile or any other foreign country in time of either peace or war. Enormous strides along these lines have been made by many countries during the war, particularly Germany. The United States is lagging somewhat behind as to actual production results, although efforts have been made and vast sums of Government moneys expended. We, therefore, feel, and believe that the great American public would feel, that any reasonable governmental protection or encouragement which can be extended private initiative and undertakings of this nature should be gladly done.

The CHAIRMAN. How much duty are you suggesting?

Mr. GRAFF. We have figured differently from the majority of people here in regard to that matter.

Mr. FORDNEY. What is the difference. How much duty do you ask for?

Mr. GRAFF. We are asking for 5 cents, but in arriving at that we have compared the costs on the normal basis, costs over there with our costs as they are to-day, leveled down to a normal basis, and then we shall expect that the legislation shall take care of the exchange question.

Mr. COLLIER. You don't make fertilizers?

Mr. GRAFF. Oh, yes. We can, but not as yet; no, sir.

Mr. COLLIER. We had some question the other day where a plant costing $100,000,000 down here had been done away with.

Mr. GRAFF. Entirely apart from the question of exchange, as above suggested, that is, a blanket arrangement whereby the exchange is taken care of in granting the other relief, we do not think it is possible for the different figures put on these different items——

The CHAIRMAN. We would like to know how much you think you ought to have.

Mr. GRAFF. That was what I was coming to. We respectfully request a specific import duty on nitrite of soda of 5 cents per pound. In order that our Canadian plant may not be killed——

Mr. RAINEY. Do you want a tariff on nitrate of soda?

Mr. GRAFF. There is no tariff against us in Canada now.

Mr. RAINEY. You want your own plant excepted from the tariff, so that you can manufacture abroad. You want to bring it in here without duty, so that everybody else who manufactures abroad will have to pay duty?

Mr. GRAFF. It will be entirely a benefit to this country.

Mr. RAINEY. I know it will be a benefit, perhaps, if they all came in free, but how is it to be a benefit for yourself to come in free and

everybody else not free? It is a benefit to you personally, but to nobody else.

Mr. GRAFF. It is an absolute necessity for the dyestuffs people.

Mr. RAINEY. Is it not just as great a necessity for somebody else to manufacture nitrite and bring it in free as for you to bring it in free?

Mr. GRAFF. They are manufacturing it abroad now, but that is working hardship upon the dyestuffs industry.

Mr. RAINEY. Would not you work the same hardship if you brought it in free? That is, you want everybody else taxed except yourself?

Mr. GRAFF. No, sir. That is not so at all.

Mr. RAINEY. Is there anybody else who manufactures nitrite that you do not want taxed except yourself?

Mr. GRAFF. Yes, sir.

Mr. RAINEY. You want everybody else taxed except yourself?

Mr. GRAFF. No. That is not the idea at all.

Mr. RAINEY. Do you want your Canadian product taxed? Do you want a tariff against your Canadian operations?

Mr. GRAFF. We want some arrangement, if possible, whereby the product of this plant can come into this country free.

Mr. RAINEY. You want to come in free yourself, but you want everybody else taxed.

(Mr. Graff concluded his brief as follows:)

3. As to costs and the necessity for tariff protection. Although we expect when grown to larger size to produce on a competitive basis with Germany and Norway, this has been impossible during the early stages of our enterprise, and it will prove impossible of performance for some time to come, dependent upon the rapidity of expansion, and the correction of present abnormal world conditions. On account of relatively small plants and production output, our costs are necessarily high as compared with costs in Germany and Norway where plants and processes are operated on an enormous and efficient scale. Norway is operating one air nitrate plant where as high as 350,000 electrical horsepower is used at a cost one-half of that which we at present command, and power, it must be remembered, is our largest cost item. Their ocean freight to our shores, as compared with our all-rail haul across the country, is less than one-half. Labor in Norway and Germany is but a fraction of ours. With them, also, nitrate of soda is in reality a by-product, whereas with us it is a main product.

In addition, large surplus stocks exist over there as an outgrowth of war activities and last, but not least, the abnormally unbalanced foreign exchange situation still further mitigates in their behalf as against American producers. The question as to a tariff which will give the proper weight to all the factors affecting the issue is a very complex one, particularly so by reason of the exchange which is of course different for the various countries. In other words, as compared with standard values the present value of the German mark is only one-seventeenth, while the Norwegian krone is worth nearly one-half of normal. Evidently, a specific or ad valorem duty which fairly adjusts the deflated value of a certain country's currency may, and probably will, affect another country inequitably. For instance, under present conditions, and from the standpoint of exchange purely, it will certainly be necessary to erect a higher tariff wall against Germany than Norway, and greater protection is necessary against both of these countries than against Great Britain. Also, the relative position of the countries in this respect will not remain constant in the future, but will fluctuate over a long period of years subject to gradually changing world conditions which will ultimately compel a return to the normal. This very exchange situation is of the gravest danger, and must be effectively and adequately met by the Government in some manner. It can scarcely be expected that individuals appearing before this committee, who are presumably more or less directly interested and perhaps claim no expert knowledge as to the analysis of the exchange or general foreign situation, shall compute and recommend specific or ad valorem duties on the multitudinous tariff items which will equitably include proper allowances to cover this complex proposition. May we be permitted to suggest, therefore, that a blanket or general clause be written into the proposed bill which shall provide the necessary remedy in the nature of an additional duty or tax, separate and apart from the regular specific or ad valorem

duty, and so worded as to adequately and equitably equalize the fluctuating conditions of exchange for all foreign countries. May we also be pardoned the warning that in the case of a general upward revision of the American tariff a very serious danger of even greater importations, or dumping, of foreign materials than is now taking place in order to take advantage of such legislation, will arise. May we suggest the grave necessity for adequate protection against this threatened deluge, possibly through making the proposed tariff act retroactive. We also heartily recommend the principle of basing ad valorem duties, where such are to be employed, on the fair American market sales value at the point of importation.

4. Entirely apart from the question of exchange, which we are confidently hoping will be satisfactorily met by the Government in some general manner as above suggested, we respectfully request a specific import duty on nitrite of soda of 5 cents per pound. In order that our Canadian plant may not be killed by this general tariff, through being placed on an equality with the European producers, thus crippling us to the possible extent of being compelled to close both of our factories, and in view of the fact that no Canadian import duty now exists on nitrite of soda, that none is at present produced in Canada except our own, which is all brought into the United States, thus benefiting this country only, we further ask that nitrite of soda actually manufactured in Canada be allowed free entry into the United States so long as free entry into Canada prevails as regards this commodity. In arriving at the above suggested specific duty, we have leveled and adjusted our present costs, f. o. b. cars, delivered Atlantic seaboard, to what they would have been under prewar conditions, adding a reasonable margin of profit and comparing the total with the actual prewar selling price at the same location and under the same conditions. In other words, we have assumed that the costs of producing and doing business have increased more or less equally here and abroad. The inequality in exchange due to the deflating of currency in European countries caused by their enormous financial burdens resulting from the war, and the consequent low purchasing power of their moneys, and impaired credit, will be in addition to the above proposed duty as we are expecting the Government to find a satisfactory solution for this problem. We consider our request as here set forth fair and equitable. We believe it will meet with, and have the support of, the actual users and buyers of nitrite of soda, namely, the American dyestuffs manufacturers, who appreciate the necessity for this protection. We consider such protection vitally necessary because of the fact that our business in this product furnishes the very life blood of our existence during these early stages of our career. In further support of our contention that foreign producers are doing their utmost to benefit from the present abnormal conditions we desire to read to the committee the following circular letter, attached hereto, recently issued to users of nitrite of soda in this country by agents of the powerful Badische Anilin and Soda Fabrik of Germany, wherein they solicit present and future business at actual prewar prices with suggestions as to shading even these. That is, the Germans are offering to sell right now at a heavy margin below our actual costs. This letter speaks louder than any words we can utter or any picture we can draw. As an American corporation, and in behalf of an essential and vital American infant industry, we appeal to this committee and to the Government of the United States for adequate protection. If such protection is not extended, this company will probably be forced to suspend operations, involving the private loss of our investment and the loss to the country of this important industry.

C. F. GRAFF, *President and General Manager.*

ADDITIONAL BRIEF OF AMERICAN NITROGEN PRODUCTS CO.

1. We respectfully request permission to insert in the record under the tariff hearings pertaining to nitrite of soda this letter and the attached clipping from the January 12th issue of a chemical journal entitled "Drugs and Chemical Markets," published at New York City, entitled "Germany's First Gun." The statement contained in this report is self-explanatory and constitutes additional proof in support of our claim as to the urgent necessity for adequate protection in behalf of nitrite of soda.

2. Reference is also made to paragraph No. 4 of our brief pertaining to nitrite of soda presented at the committee hearing on January 7, where we request a specific duty of 5 cents per pound, irrespective of the foreign exchange question, as we hope this will be adequately taken care of by a general or additional tax. We wish to state here, however, that in case no such additional tax is to be provided, it will be necessary for us to at least have a specific duty of 5 cents per pound plus 30 per cent ad valorem based upon fair average sales price of the product in the American market, or the equivalent of this combination in one specific duty of from 8 to 10 cents per pound.

Such a rate is necessary to protect against Germany, which can dump over here in huge quantities, as indicated by clipping above referred to, and sell at almost any price.

C. F. GRAFF,
President and General Manager.

LETTER OF C. B. PETERS CO. (INC.), NEW YORK CITY.

GENTLEMEN: As previously advised you, we have for distribution in this country, through American fiscal agents, that portion of nitrite of soda as produced by the Badische Aniline & Soda Fabrik of Germany, through their atmospheric nitrogen development, which has been allotted for consumption in the United States.

Naturally because of the existing business depression there is very little activity, with the result that prices have been reduced considerably; in fact, for spot material we can offer, subject to change, ton lots as low as 6 cents per pound, ex warehouse at New York, and for larger quantities it might be possible to shade this figure with a firm bid in hand, although the feeling here is very strong that the bottom of the market has been reached. We have on hand at the present time in New York approximately 50 tons, and no further shipments will come into this country until orders are placed for shipment from abroad.

We have instructions from Germany to find out the prospects of nitrite of soda consumption in the United States over the year 1921, and for this reason we are taking the liberty of addressing you to ask if you will kindly let us have your opinion in this regard. If the market has actually reached its lowest level, this might be a good time to consider requirement contracts for the coming year, and any suggestions that buyers have we shall be happy to cable abroad. The quality of our material is as good as that produced in any part of the world, and we shall be pleased to forward samples upon request.

C. B. PETERS, *President.*

[Drug and chemical markets, January 12, 1921.]

GERMANY'S FIRST GUN.

Ammunition for Germany's first battle for the reconquest of American chemical markets has already arrived. Without warning the Badische Anilin-und Soda-Fabrik ships its agents, Kuttroff, Pickhardt & Co., enough sodium nitrite to supply this country amply for the next 15 or 18 months. The shipment consisted of 4,611 casks containing something over two and a half million pounds of nitrate.

The problem of disposing of this enormous quantity of material rather appalls these American agents, and, in order to reduce the "selling resistance" as far as possible, the have appointed C. B. Peters Co., as their agents. Then comes the widely circulated Peters letter offering nitrite of German origin of which "We have on hand at the present time in New York approximately 50 tons, and no further shipments will come into this country until orders are placed for shipment from abroad." Apparently the 50 tons is an abbreviation for 1,300 tons, but otherwise the statement seems untactfully correct. No more shipments need be made from abroad until a tremendous volume of orders has been booked. Certainly it would be useless to argue the question of price.

So much has been said of what the Germans will do if we do not protect our industries that we have generally become more or less apathetic on the subject. Here is a concrete definite instance of what has already happened while protection was relaxed. There is nothing to prevent a repetition of these tactics on many other items of even more importance than nitrite, if some protective measure is not passed to be effective immediately on the signing of official peace.

It takes only a day to clear a vessel into port with enough material to put several American industries out of business for a number of years.

BRIEF OF HARSHAW, FULLER & GOODWIN CO., CLEVELAND, OHIO.

We are manufacturers of sodium nitrite. Our factory is located at Cleveland, Ohio. Our raw material is sodium nitrate. Sodium nitrate is now on the free list under paragraph 605. If sodium nitrate should be taken from the free list and a duty imposed, then we desire a compensating increase in duty on sodium nitrite. We began the production of sodium nitrite in 1915, but because of necessary experimentation our production was comparatively small during the years 1915 and 1916. During

1917, 1918, and 1919 we produced the material in considerable quantities, but at present our factory is closed, as we can not compete with prices now being made in the United States by manufacturers located in foreign countries.

We would like very much to continue the business of manufacturing nitrite of sodium and believe we could do so successfully if the duty is increased from one-half cent per pound, as it is now under paragraph 67, to 2 cents per pound, and we respectfully ask that this increase be made.

W. A. HARSHAW, *President.*

PRUSSIATE OF POTASH.

[Paragraphs 64 and 67.]

BRIEF OF THE HENRY BOWER MANUFACTURING CO., PHILADELPHIA, PA.

SIR: We are manufacturers of yellow prussiate of potash, covered by paragraph 64 of the tariff act of 1913, and yellow prussiate of soda, covered by paragraph 67 of the tariff act of 1913. Duties on these articles were reduced from 4 cents and 2 cents to 1¼ cents and ¾ cent per pound, respectively, owing to incorrect information given to the Ways and Means Committee by one Herstein, who was employed as a chemical expert by the Ways and Means Committee during the framing of the so-called Simmons-Underwood tariff bill.

Paragraph 64: We would ask for a duty of 4 cents per pound on yellow prussiate of potash, provided there is no change made in the duties assessed on the articles from which yellow prussiate of potash is manufactured, as follows:

Carbonate of potash, free (par. 580).

Muriate of potash, free (par. 580).

Spent oxide of iron and cyanogen sludge, 10 per cent ad valorem (par. 385).

Lime, 5 per cent ad valorem (par. 73).

Paragraph 67: *Yellow prussiate of soda.*—This duty was also cut under the mistaken impression that yellow prussiate of soda could be made from the old so-called "animal matter process." Yellow prussiate of soda has always been made from waste from the manufacture of gas works. We would ask that a duty of 2 cents per pound be given yellow prussiate of soda, provided there is no change in the duties levied on the articles which are used in its manufacture, as follows:

Soda ash, free (par. 605).

Spent oxide of iron and cyanogen sludge, 10 per cent ad valorem (par. 385).

Lime, 5 per cent ad valorem (par. 73).

At the present time we are not able to give any definite information as to the cost of these articles when manufactured abroad.

WILLIAM H. BOWER, *President.*

YELLOW PRUSSIATE OF SODA.

Reference: Summary of Tariff Information, 1920, pages 123 and 128.

Present duty: Three-fourths cent a pound.

Chief competing countries: England, Germany, and France.

United States production: 1914, 4,000,000 pounds (about); 1918, 9,050,000 pounds; value, $2,690,110.

United States imports: 1914, 2,295,000 pounds; value, $171,800; 1918, none.

United States consumption: About 10,000,000 pounds.

New duty rate should be 2 cents a pound.

For the following reasons: Before the war it was not possible, even with a 2-cent duty, to establish prussiate recovery in the by-product coke-oven industry of this country. There is now sufficient manufacturing capacity to supply all the country's needs, but protection is necessary to prevent foreign competition from destroying the industry.

Uses: Blue pigments, calico printing and dyeing, case hardening of iron, manufacture of ferricyanide.

TALC AND SOAPSTONE.

[Paragraph 69.]

MICHAEL DOYLE, PRESIDENT INTERNATIONAL PULP CO., NEW YORK CITY.

Mr. DOYLE. Mr Chairman and gentlemen, I represent the International Pulp Co. of New York City and Gouverneur, St. Lawrence County, N. Y. I also represent the talc and soap stone producer of the United States.

There are about 30 of the producers of talc and soapstone in the United States at the present time. The amount invested in the mills and mines is about $8,000,000.

The business is located very largely in the State of New York, the New England States, the Southern States, and in California. About one-half of the investment and I think more than one-half of the output is in the State of New York and in the New England States, of which latter, Vermont stands first.

The tariff bill passed in 1913, from our experience as manufacturers and sellers in the American market and in foreign markets, has worked very largely to the advantage of the importers and the foreign producer. It has not worked, in our opinion, to the advantage of the Government in the way of bringing increased revenue or the revenue that was expected, while it has not given to the American manufacturer the protection or the position that he had a right to expect at that time and which it was expected he would be able to obtain.

One of the reasons for this is that the rate of duty was changed from a specific, such as existed under the tariff in 1909, I think, and made upon an ad valorem basis in 1913. The unfair competition, if I may use that term, that has come from that change has been this: We have been compelled to meet a competition that was based on what we call, if not absolutely incorrect costs, costs that were unfair to the American producer. We desire a reclassification and a revision of the Underwood law, which calls for a rate of 15 per cent, and that applies upon the crude, upon the finished, and the manufactured cut and sawed talc and soapstone imported into this country. We desire that the new rate—when such shall be put in force, and we feel it should be—should be clearly upon a specific basis. We should go back to the tariff rate of 1909 with such changes and such amplifications in the way of classification that will be fair to us and fair to the Government.

As an illustration of that I may tell you that for many years talc produced in the Pyrenean district, very near to the Spanish frontier, exported by France to this country, came in here at prices ranging—I mean now the declared values—from about $4.32 to $5.82. There was no market for this material in the Pyrenean Mountains, so the bare cost of that material was taken as it existed there in the mountain districts, without any regard to freight charges to the port of export, say, for example, Bordeaux, or to the port of destination, New York. That material sold in our markets at prices ranging from $20 to $30 and sometimes as high as $40 per ton.

Mr. TREADWAY. You say the price was $4.50 per ton?

Mr. DOYLE. $4.32 per ton.

Mr. TREADWAY. That is about $4.50.

Mr. DOYLE. About $4.50. I have the exact figures for that, which I can give you.

Mr. GREEN. When was that?

Mr. DOYLE. That was in the years 1916, 1917, and also the year 1912. That condition was such a flagrant abuse that attention was called to that and some change has been made in the past year.

We also suffered from the same adverse competition on the part of the Canadian manufacturer. He had a plant or a mine or a mill in some isolated district, and having no local market, put as the declared value the bare first cost of the goods. The result was that his goods came in here at prices considerably lower than they were with us.

The great mistake is, looking at it as I look at it personally, that if an ad valorem value is desired, for any reason, it should not be upon the value of the goods in some remote district abroad, in some distant country, but it should be on the value of the material or article of merchandise in the American port which it enters or in the market in the United States in which it is consumed and used. In that way the Government would receive very much more in the way of revenue and the American manufacturer would receive the protection that he is entitled to or has reason to expect. In any event it would do away with what we call unfair trading.

Mr. LONGWORTH. How can you determine that?

Mr. DOYLE. The values are very well known, first in the American markets, for standard qualities of merchandise. We also know fairly well, not accurately by any means, the costs of production in the foreign countries.

Mr. LONGWORTH. You do? You are the first man that I have seen that does.

Mr. DOYLE. I do not say exactly, but we know the cost of transportation, although the cost of transportation varies and has varied very much in recent years. Coming to that point, I want to show you how unfair a part of this competition is.

Mr. LONGWORTH. I wish you would advise us. Most of the committee would be very glad to do that, but how can you determine the value of a suit of clothes produced in Birmingham, at the port of New York? You do not know the cost of production.

Mr. DOYLE. The cost of labor in France ranges anywhere from $1.75 to $2.75 a day in our goods, basing it upon a gold basis. In our country at the present time for the same labor we pay our miners an average of $5 a day. We pay the workers in our mills an average of $4 a day, and that is about the average throughout the entire country. Now, it does not seem to me that it should be a difficult matter for our experts to figure out as to what would be the fair basis for an ad valorem tax or tariff. Personally I am against an ad valorem tax or rate. I think that it should be specific in every instance.

In the first place, if there is a specific charge or a rate made, the Government then will receive an exact amount. They will know exactly, either in the quantity or in the yardage or the weight, as to what they will receive. I know that our industry will be better off, will be better protected, if that is put upon a specific basis rather than upon an ad valorem basis.

Mr. TREADWAY. You recommend the old rate of 1909, 1 cent a pound?

Mr. DOYLE. I would rather go back to that rate; but what we wish to request is this, that the new rate——

Mr. GREEN. I think that the rate of 1909 was only on French chalk.

Mr. DOYLE. It was about the same. The rates which we recommend, which we respectfully bring to your attention, are those embraced in House bill 9063, introduced by Mr. Fordney, and referred to the Committee on Ways and Means. That provides for specific rates; and, further, it provides a change—that the rate shall be one-half a cent per pound on crude material rather than to be free, as it was in the act of 1913.

I want to give you an illustration to show you what has been done in the way of crude material that has come into our country in the past three or four years. This is [indicating] the crude material. It is what we call rock talc, and this is crushed and made into various shapes, but here [indicating] is what comes in as the crude material. It comes in free into this country. They manufacture it to the extent of about 90 per cent of what is required, leaving about 5 or 10 per cent of work to be done in this country, taking advantage of that clause or of that paragraph which provides for the entrance of this material in its crude form. That is one reason why we ask that the specific rate of duty of one-half a cent per pound be put upon the crude material.

Mr. GREEN. It would seem at first blush to be a pretty heavy rate on crude material. We never have had any rate at all on crude material, at least as far as my recollection goes.

Mr. LONGWORTH. That [indicating] is not crude material.

Mr. DOYLE. The act of 1909, I think, called for a specific duty of 1 cent per pound.

Mr. GREEN. That is true, but I think that was only on the French chalk, pulverized.

Mr. BACHARACH. It called for 1 cent a pound on French chalk in 1909.

Mr. DOYLE. French chalk—it was practically the same material.

Mr. GREEN. That was not crude material, unless my memory is at fault; but that is immaterial. What we need is what we should do now.

The CHAIRMAN. Are you suggesting a duty provided it is in any way advanced in manufacture?

Mr. DOYLE. Yes, sir; Mr. Chairman.

The CHAIRMAN. You say that that sample that you have there is about 90 or 95 per cent advanced?

Mr. DOYLE. About 90 to 95 per cent, so that all that is necessary is, to call that manufactured here, to cut that down, shape it, either with dies or milling machines, which is done very easily; but the principal work, anywhere from 80 to 90 per cent, the real work of manufacture is done upon this so-called crude material.

The CHAIRMAN. Is it milled in any way except just shaped?

Mr. DOYLE. No; it is sawed.

The CHAIRMAN. That is manufactured, isn't it [indicating sample produced by Mr. Doyle]?

Mr. DOYLE. We claim it is manufactured.

The CHAIRMAN. Is it more than the rock shaped up?

Mr. DOYLE. No; nothing else; nothing done except to shape it.

Mr. GREEN. That is sawed up?

Mr. DOYLE. But that is part of the manufacture.

Mr. DOYLE. Yes; it is of that order.

Mr. TREADWAY. Would that be regarded as French chalk now, that piece there [indicating]?

Mr. DOYLE. Yes; only that it is perhaps a little—French chalk is a little whiter in color. This is a little darker than French chalk usually is. They use a certain grade of chalk.

Mr. GREEN. You do not mean to say that is what they call French chalk?

Mr. DOYLE. No; I do not. I say it is similar to it. It is used for marking—used on cloth, and for other purposes.

Mr. TREADWAY. What is the relation between the talc and the pulp?

Mr. DOYLE. There is not any relation except that suggested by the name of our company. Our company was organized in 1894 with the intention of doing business both in wood pulp and in talc pulp. Eventually the talc became of more importance and we discontinued the wood pulp end of the business and took up all talc. We are perhaps the largest single producers of this material at the present time in the country, if not in the world. Our mills are located at Gouverneur, in St. Lawrence County, N. Y. Our output is about 50,000 tons a year. We produce about 25 per cent of all that is made in this country.

I wish to call the attention of the committee to one important fact in relation to our work. We have about 5,000 hydraulic horsepower that is used in the grinding, in the crushing of this material. Without that cheap horsepower it would be exceedingly expensive for us to do this work on the scale we do it. We mine this, we bring this from a distance varying from 100 to 900 feet below the surface. We have mines now from which we are removing this material 900 feet below the surface.

The CHAIRMAN. Where are those mines?

Mr. DOYLE. Located at Gouverneur in St. Lawrence County, N. Y. We have half a dozen mines there from which we take this material. Fully 65 to 70 per cent of all of the work that is done on this material is labor. These are cheap economic minerals. They are of little value in the ground. We have many leases there and we buy the material. We pay from 50 cents to $1 per ton for the ore down in the ground as nature placed it. We do the work of mining, bring it to the surface, sort it, take it to our mills, transport it by railroad to our plant, then crush it and grind it.

I wish to call your attention to the fact that in order to develop this industry it was necessary to grind it so fine that the grit, the silicate grit, would be almost entirely removed, eliminated. In the process of grinding we reduce it to flour so fine that 97 per cent of it will go through a 250-mesh screen—that is, a screen with 250 openings to the square inch. In that way the business has been developed by our superior methods of manufacture.

What we claim is this, that inasmuch as America developed this industry and worked very dilligently at it for many years, until we have reached a very good position at the present time, not only in this country, but in the world, we should be protected in that; for it is only when we developed the business that the foreign manufacturer

has come in here some 12 or 15 years ago and has sought to divide this market with us.

The CHAIRMAN. What difference is there between that and mineraline? Do you know that?

Mr. DOYLE. No; I do not know the difference.

The CHAIRMAN. Do you use that for any other purpose?

Mr. DOYLE. We use this principally for paper, for the paper trade. It is used for the paint trade. It is used for the rubber trade. It is used in the asbestos trade. It has very wonderful properties. It is almost immune to ordinary acids. It preserves its color. It has great heat resistance against both heat and cold; and as a filler for paper it is one of the very best in the market. It is also used very largely in the rubber trade.

The CHAIRMAN. I have a sample of mineraline, which is ground marble. Have you concluded?

Mr. DOYLE. I have just one word to say.

The CHAIRMAN. We have given you considerably more time than was allotted to you.

Mr. DOYLE. I want to tell you what has been done. Up to 1880 in this country very little was done. From 1880 to 1920 the total production in the United States was 3,960,148 tons. The value of that in round numbers was $42,000,000. The average price for all the period of 40 years was $10.75.

W. C. BOSWELL, TALC & SOAPSTONE ASSOCIATION, BALTIMORE, MD.

Mr. BOSWELL. I represent the massive talc miners of the Talc & Soapstone Association. That massive talc is used exclusively for insulation and in gas burners. It is found in Maryland, Virginia, North Carolina, and Georgia. This material comes in large forms. We call this [indicating] a blank. It comes to this country under the name of talc, steatite, soapstone, and French chalk. It is shipped into this country and comes in a blank like this, even smaller than that. They bring that in here as crude talc, or crude French chalk. In a majority of cases it is partly machined. Take a burner, for instance, and they will take this blank, as you see here, they will machine that burner down to except cutting one slot. It has entered this country as a blank. It is a blank in one sense of the word; but the manufacturer here receives it and he performs one operation, sometimes two, and he has a finished product. They eliminate the surplus weight, and the labor in that country being much cheaper than ours, we are asking that the tariff be raised upon this grade of material, and the classification generally changed to read or to cover talc, steatite, soapstone, and French chalk.

Mr. Doyle has mentioned only one clause of the tariff, half a cent on crude material. We ask in bill 9063, on the talc, steertite, soapstone, and French chalk, crude, unground, one-half of 1 cent; on ground or pulverized, 1 cent a pound; on talc, steatite, and French chalk, made or sold in the form of blanks, crayons, or tubes, 2 cents a pound.

BRIEF OF TALC AND SOAPSTONE PRODUCERS' ASSOCIATION, BALTIMORE, MD.

Talc is not a war mineral, but one of the most important American minerals, and has been mined and used by manufacturers of paper, leather, cloth, paints, earthenware, rope, rubber, plaster, and many other items, for 30 years.

Talc is truly an American mineral. We produce and use more talc than all other countries.

We have 33 producing mines, representing more than $8,000,000 in property and machinery: California, 8; Vermont, 6; North Carolina, 8; New York, 2; Georgia, 4; Maryland, 3; Pennansylvania, 1; New Jersey, 1.

The most valuable is the massive talc that is so uniformly fine grained, compact, fairly soft, free of cleavage. Must be free of grit and low in iron.

The valuable properties of finished massive talc are the great hardness and tenacity, resistance of heat, acids, and alkalies, high in compressive strength, high dielectric strength. There is no other known mineral that can be manufactured into articles from the raw state and hardened in a furnace and retain its perfect shape. Massive talc is an indispensible for the manufacture of gas tips, gas burners, bushings for gasoline engines, electrical insulation, and hundreds of other like articles.

Massive talc is mined in large blocks or bowlders, then cut into smaller size blocks by man power, using cross-cut saws. These blocks are then taken to rip or cut-off saws and cut into cubes or blanks, as many of the articles manufactured are of special design and the blanks are cut according to specifications. The sizes range from one-fourth by one-fourth by one-half to 3 and 4 inches square, and larger.

These blanks are placed one at a time in small high-speed lathes, when the articles is turned, drilled, slotted and threaded as the case may be. The talc article in the green state is placed in small ovens or kilns heated by gas or electricity, where, they are subject to a temperature of about 2,000° Fahrenheit from 24 to 48 hours, when the articles become harder than glass.

There is practically no expansion or contraction, standard threads cut in the original talc are still standard after the baking.

Massive talc is mined in Maryland, Virginia, North Carolina, Georgia, Vermont, and California. For the past eight years a number of the mines have been forced to close down, owing to the imported material from France, India, Italy, China, Japan, and Germany, massive talc coming from these countries as crude talc, free of duty, notwithstanding it is cut into cubes, blanks, and strips, and a large per cent partly manufactured, only one or two operations needed to complete the article after it is received by the manufacturer.

When it is in the large blocks or bowlders, it is brought in as ballast without freight charges.

To produce this material in this country it costs the mine owner $20 per ton to get the raw material out of the mine (1914 wage scale); to cut into cubes, $40 per ton; to cut into small blanks like samples referred to, $100 per ton.

The importers are offering the large blocks or bowlders at $7 per ton at the shipping ports of China, India, and Japan.

The cut blanks and cubes are quoted at $27 per ton, foreign ports.

The American mines supplied the abnormal demand during the war and the material has met every requirement.

The talc miner has been at the mercy of the importer for several years. This has resulted in several failures in mining companies.

Talc is imported under different names—talc, steatite, French chalk, soapstone, and lava.

We respectfully petition that the classification on talc be revised and a specific duty be placed.

The bill introduced by Hon. Joseph W. Fordney, H. R. 9063, September 5, 1919, we think would help to encourage the talc interests of America.

We respectfully ask that the following duties and classifications be granted:

Talc, steatite, soapstone, and French chalk, crude and unground, one-half of 1 cent per pound.

Talc, steatite, soapstone, and French chalk, ground, washed, powdered, or pulverized, 1 cent per pound.

Talc, steatite, soapstone, and French chalk, cut or sawed, or in the form of blanks, cubes, or crayons, 2 cents per pound.

Manufactured articles from talc, steatite, soapstone, and French chalk, wholly or partly manufactured, 50 per cent ad valorem at port of entry.

W. C. BOSWELL,
Representing 28 Mines.

Mr. HULL. Mr. Chairman, there is a question constantly coming up here with each witness almost about the labor cost of production in other countries, and especially in Germany. In discussing that they give us the amount paid for labor in the American dollar, gold. I have dictated a paragraph here that I would like to read into the record. This is what I have prepared, and I will read it. I will not take one minute:

In comparing present German labor costs of manufacture with American, the statement is repeatedly made that the American laborer is receiving $4 or $5 a day while the German laborer only receives about 50 cents a day. This statement is decidedly misleading and inaccurate, because it is based on the American or gold value of the number of German paper marks which a German laborer receives for a day's work. The truth is that the German paper mark buys more commodities in Germany than it will buy abroad and this is the true criterion, with the result that the commodity and wages value of this mark is greater in Germany than in other countries.

This basis of comparing labor costs of production is the only one at all accurate. Again, exchange means what the German paper mark will buy in America, which is much less than in Germany, because there are two elements in exchange, one is difference between the German paper mark and the German gold mark—this represents the depreciation of German money; while the other is the true rate of exchange—that is, the purchasing power of the paper German mark in gold in the United States. Under normal conditions the rate of exchange would not fall below the cost of shipping gold. Let me add that German labor is now on the 8-hour basis, and not on the 10-hour basis.

I wanted to get that before the gentlemen who are to be here, so that they will give us comparisons on that basis, if it is accurate.

Mr. GREEN. In that connection, I would like, with the permission of the chairman, to put into the record a statement with reference to the cost, the number of plants, and workmen, in the German chemical industry, as given in a late commerce report.

(The statement submitted by Mr. Green is as follows:)

DEVELOPMENT OF THE GERMAN CHEMICAL INDUSTRY DURING 1919.

[Howard W. Adams, representative of the Department of Commerce, Berlin.]

A recently published report on the German chemical industry for the year 1919 contains some interesting data concerning the development of this important branch of industry.

The following figures show the number of plants in operation during 1919, together with the number of workmen employed therein:

District.	Number of plants.	Number of workmen, full time and part time.	Decrease in number of full-time workmen from preceding year.
			Per cent.
Berlin	2,518	68,303	7.31
Breslau	1,295	26,377	20.84
Hamburg	2,043	73,859	27.89
Cologne	2,862	121,537	31.85
Leipzig	2,648	125,559	12.04
Mannheim	1,325	56,616	12.80
Frankfort	1,061	51,198	2.70
Nuremburg	1,648	27,623	13.35
Total	15,000	544,161	18.18

From these figures it appears that the greater part of Germany's chemical plants are located in the Leipzig, Cologne, Berlin, and Hamburg districts. There were 15,204 plants in operation in 1918, while the total had fallen to 15,060 in 1919, a decrease of 1.95 per cent. This decrease is due chiefly to the fact that the chemical plants in Alsace-Lorraine were eliminated from consideration in 1919. The number

of working days credited to the 294,766 full-time workmen reached a total of 88,231,447 against 107,835,679 for 1918.

WAGES PAID AND NUMBER OF PLANTS IN OPERATION.

The total amount of wages earned by workmen and employees in the chemical industry in 1919 amounted to 1,131,682,109 marks. If one uses as the basis of comparison the number of plants in operation, the number of full-time workmen, the wages earned, together with the annual compensation received, the figures for the single years during the period 1913 to 1919 show a generally upward trend.

Year.	Number of plants.	Number of full-time workmen.	Total amount wages paid.	Average annual compensation of full-time workman.
			Marks.	*Marks.*
1913	15,042	227,629	351,520,206	1,266
1914	15,014	245,980	313,506,106	1,273
1915	14,914	219,646	295,217,251	1,344
1916	14,998	256,420	382,783,261	1,493
1917	15,129	334,851	652,877,501	1,960
1918	15,204	360,256	889,141,025	2,468
1919	15,069	294,766	1,064,782,786	3,612

A slight decrease is to be observed in the number of plants in operation during the period 1914 to 1916. In 1917 the number of plants was larger than for the year 1913, and continued its increase in 1918. In 1919, however, there occurred the slight decrease previously noted. The number of full-time workmen employed in 1919 exceeded by about 17,000 the number employed in 1913. The year 1918, with its total of 360,256, marks the high-water point in the number of full-time workmen employed.

It is interesting to observe that compared with 1913 the amount of wages received in 1919 has tripled. The highest point in the total wages paid was reached in 1919. Hand in hand with this growth went the increase in the average annual compensation of the full-time workman. In 1913 this figure amounted to 1,266 marks, while in 1919 it had risen to 3,612 marks. Everything points to a heavy increase in the 1920 average against that of 1919. In the course of the present year workmen in the chemical industry have been paid such amounts as would indicate that the average annual wage might reach a total of 18,000 marks or even more.

BRIEF OF L. A. SALOMON & BRO., NEW YORK CITY.

The undersigned, L. A. Salomon & Bro., New York, N. Y., are importers of foreign, as well as jobbers in and distributors of domestic, talc.

In the present tariff talc is classified as "Talc, ground, cut, washed, or pulverized" 15 per cent, and "Talc, crude or unground" free.

We have been unable to obtain any accurate statistics regarding the importations of powdered talc during the last two years, but we estimate them at 15,000 to 20,000 tons annually. Of this quantity Canada furnished approximately one-half, the balance coming from Italy and France, the latter country furnishing about 2,000 tons.

The value of the importations of crude talc during 1917, 1918, and 1919 amounted to approximately only $10,000 per annum.

Occasional importations are made of cut talc, talc crayons, or talc pencils, mostly from France, but the amounts involved are very small.

The talc production in this country can be divided into four distinct classes, viz:

1. The talc produced in New York State in the vicinity of Gouverneur, which is an asbestiform mineral, also sometimes known as asbestine. It is of a fibrous nature and does not possess the slippery feeling which is characteristic of crystalline grades of talc. Most of it is used as a filler for paper. It is a distinctly American product and we do not know of any similar product found abroad. In fact prior to the war large quantities of this material were shipped to Europe. It is not suited for toilet purposes.

2. The talc produced in Vermont, the largest talc producing State in the Union. Most of this talc is of inferior color, although possessing a fair amount of slipperiness. It is largely used for technical purposes, such as a filler for paper, textiles, paints, rubber, etc.; also for roofing purposes. It is used in toilet preparations only in a limited way, as it is not white enough to make it desirable for this purpose. The only imported talc that can be compared with it is what is known as No. 2 French talc, but the importations of the latter in 1920 amounted to approximately only 1,500 tons, which is an insignificant amount compared to a production of Vermont talc, amounting to over 90,000 tons annually. Except possibly at some points close to the United States seaboard, the No. 2 French talc can not compete with Vermont talc.

3. The talc produced in the southern States, such as Virginia, North Carolina, Georgia, Maryland, also Pennsylvania. These grades of talc are of a miscellaneous character, most of them inferior. A large portion of them is sold in the form of powdered soapstone for use in foundries and for purposes for which foreign grades of talc can not compete at all. Considerable quantities are also worked up into slabs for washtubs, insulation, and similar purposes. Some is cut into pencils and crayons.

4. The talc produced in California. Most of the talc produced in this State is of fair quality and, while inferior to the best grades of imported talc, nevertheless answers the requirements of a great many manufacturers of toilet preparations. The developments in this State are comparatively new but have made considerable and steady progress during the last few years, which is the best proof that the industry is amply protected and able to take care of itself. No statistics subsequent to 1918 are available but in that year the production amounted to 10,364 tons, about 150 per cent more than in 1917, when the production amounted to 4,152 tons.

In answer to statements made by a witness before your committee on January 7, 1921, we are attaching hereto, with the permission of Messrs. George H. Gillespie & Co., Madoc, Ontario, Canada (who are the largest producers of Canadian talc), an extract of a letter received from them under date of January 18, 1921. We believe that this will prove to the satisfaction of your committee that the low cost of production in Canada and low values referred to by the witness in question were erroneous. The competition complained of by American producers is not due to the importation of foreign talc, but to competition among the American producers themselves.

Practically all foreign talc coming into this market is of a superior quality and, due to its different chemical and physical properties, fills a distinct need and therefore does not compete with, but supplements, such grades as are produced in this country. Our Government regognized this during the war and the War Trade Board reversed a ruling which it had made prohibiting the importation of foreign talc.

The great depreciation in the value of francs and lire has had no bearing on the duty collected on importations of French and Italian talc, as we are purchasing French talc in dollars and Italian talc in dollars or sterling. Besides the cost of French and Italian talc has enormously increased since the war and importations are far below the prewar figures.

To sum up the situation, it is our opinion that the production of high grades of white talc in this country is far below the requirements of the consuming trade and that importations will have to continue to take care of the existing shortage.

With a growing talc industry amounting at present to 200,000 tons and importations amounting to only about one-tenth of this tonnage, that is, about 20,000 tons, there does not seem to be any need for a higher tariff and we accordingly urge that the present rates of duty be retained.

[Extract from letter from George H. Gillespie & Co. Dated Madoc, Canada, Jan. 18, 1921.]

No asbestiform talcs, such as Gouverneur talcs, are produced in Canada, and no gray talcs, as are produced in Vermont, are produced in Canada. Hence there is no Canadian competition with the great bulk of United States production.

The minimum wages paid in Canada are as follows: In mine, $5 per legal day, 8 hours; in mill, $4.65 per 10-hour day. The witness who appeared before the Ways and Means Committee at the hearing on January 7, 1921, gave the following figures: In mine, $5, unstated day; in mill, $4, unstated day. Canadian wages are actually higher than the wages paid by the witness referred to and probably higher than those generally paid in the talc industry in the United States.

The average cost of producing a ton of Canadian talc, as shown by our books during 1920, is $12, not including taxes and depreciation on plant. It should be noted that Canadian costs are high. Plant and machinery costs more than in the United States, as machinery is largely imported from the United States and has to pay duty on entry into Canada, while the severe Canadian climate adds to the cost of production.

As to the witness's allegations as to improper valuation of talc shipped from Canada into the United States, the United States Treasury Department sends a representative at frequent intervals to Canada. This representative has free access to all of our books and records and, as the result of his investigations, such representative, and not the Canadian producer, sets the value for customs purposes of the various grades of talc exported to the United States.

The fair market values so set for the past year on our grades of talc are as follows:

AA1-F grade, $22 per ton, including bags, f. o. b. Madoc, Ontario.

One grade, $16.50 per ton, including bags, f. o. b. Madoc, Ontario.

S grade, $12 per ton, including bags, f. o. b. Madoc, Ontario.

Our annual production is:

AA1-F grade, 8,000 tons.

One grade, 4,000 tons.

S grade, 2,000 tons.

It should be noted that of the lowest grade only about 1,000 tons per annum is exported to the United States.

The witness stated the average value of the United States product as $10.75 per ton. His selling prices are, therefore, lower than the cost of production in Canada.

Canadian talc is usually sold in United States currency and is so entered for customs purposes; the question of depreciation of Canadian funds has, therefore, had no effect on the duty paid. The average depreciation on Canadian funds during 1920 was about 10 per cent. This will probably be the lowest average discount on Canadian funds for the future.

It is also a fact that asbestiform talc and Vermont talc are exported to Canada from the United States and are sold at such low prices in Canada that Canadian production would be impossible against this competition.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

Foreign talc, except perhaps Canadian, imported in fiscal year 1918 for a total of 11,890 short tons, represents, in comparison with domestic production, estimated in 1915 at 166,336 short tons, a relatively small amount of the supply of this article needed in the United States. In fact, France and Italy, the only other sources of foreign talc worth mentioning, supplied, respectively, before the war (in fiscal year 1913) 4,297 and 4,436 tons, or 35.1 and 36¼ per cent, of the 12,000 tons total importation of this article from abroad. The supply from these two sources has been greatly interfered with by the war and reduced to only 376 tons for French talc and 1,407 of Italian talc in fiscal year 1918. So far, it has shown no symptom of recovery, Canada having in the meantime profited by the forced absence of Italian and French talc from the American market, to which it increased its exports from 2,664 short tons in 1913 to 11,890 in 1918.

A duty is now levied on talc at the rate of 15 per cent. Considering the small amount of talc now imported from both Italy and France, it should be excluded a priori that any increase of tariff would result in any appreciable benefit for revenue from these sources, which would certainly be further prejudiced, if not altogether stopped. This might be said, broadly speaking, in general for all talc imported, as even that from other sources, representing an article that, owing to its prevailing poor quality is worth only from $18 to at the most $50 per ton, would contribute but little to any expected increase in revenue, especially considering that duty is paid on the net value of talc at its market of origin, cost of freight excluded, which, it should be noted, represents a notable factor of the price at which talc sells in this country.

The whole question of readjustment of duty on talc, if any should be deemed necessary, should be viewed from such angle as without impairing in the least revenue or discouraging importation of such qualities of talc as are needed in this country. They are not produced here, and rates should be established to protect domestic production only where needed, namely, against the low-priced qualities of talc that are really the only grades of imported talc that may affect domestic production.

Domestic talc represents, generally speaking, a different article from the talc imported into this country from either Italy or France. The former is a cheaper article used mostly only as filler or as a substitute of higher-priced materials in such industries as the manufacture of paper, paint, soap, india rubber, earthenware, etc. The use of domestic talc, even in these industries, is conditional upon its moderate price, and should the price of the imported be increased to any notable extent by a

high tariff it would result in the monopoly of the market to the exclusion of the foreign product. Instead of encouraging, it would decrease consumption, as manufacturers would resort to substitutes.

The high freights that have to be paid on European talcs, together with their higher cost of production, prevent any competition with domestic talcs as are sold at from $9 to $18 per ton, which represent the bulk of domestic production. Comparatively unimportant is the domestic production of higher-priced talcs, as supplied in limited quantities from North Carolina and California, and selling at from $35 to $38 per ton. The fine grades of talc represent only a very small percentage of the consumption, and in this case competition from foreign talc is impossible because the present rate of 15 per cent, aside from the increased freight rates, is by itself ample to protect domestic production.

As evidence of this, Italian talc may be cited as costing at present wholesale price, laid down here duty paid at from $45 to $55 per ton, or say from $10 to $17 more than the best domestic. Under the difficult conditions in which it is mined in the Alpine districts, where the mineral is located, at something like 6,000 or 7,000 feet elevation, with lack of railroad and transportation facilities, where labor is most expensive, work suspended in the winter months, notwithstanding that overhead expenses are running, and every item of cost is at the highest figure, there is not the slightest possibility of any rebate in price. Because of its unsurpassing fineness and whiteness, its use is indispensable, too many American industries, which could not sell their finished products, such as toilet powders and preparations, not only on the home but also on foreign markets without the qualities imparted to them by Italian talc. Another important use of Italian talc is in the processing of rice for the trade.

A higher duty on talc of this source, which does not compete with American talc, would not benefit American production, but only increase the cost of an article necessary to American industry, not certainly protected by increased cost of its primal materials.

Since the whole matter of protection to domestic production in the case of talc, to put it in a nutshell, is to protect the latter against the competition of lower priced foreign talcs, it seems to this chamber that a fair way to solve the difficulties might be the adoption of a sliding scale of rates in inverse ratio of the market value of the talc in the country of origin. A rate, for instance, of 35 per cent ad valorem on talc costing c. i. f. New York not over $20 per ton; one of 25 per cent on talc costing c. i. f. New York over $20 and not more than $35 per ton; and the present duty of 15 per cent to apply on all talc costing c. i. f. New York over $35, would yield more revenue. Such rates would have the following advantages:

(*a*) That the largest percentage of domestic talc would be amply protected by the highest rate of 35 per cent;

(*b*) That the domestic talc of higher value would be fully protected by the 25 per cent rate;

(*c*) That the comparatively small quantities of foreign talc, required as a necessity by certain American industries and costing more than $35 per ton, would still be imported under the 15 per cent rate, without prejudice to the domestic talc industry.

In conclusion this chamber, unless duty on talc can be maintained at the present rate of 15 per cent takes the liberty to submit and recommend the adoption of the aforestated sliding scale on the assessment of duties on talcs imported into the United States.

Brief of The Anglo American Talc Corporation (Ltd.), Madoc, Ontario, Canada.

Early in the spring of 1892, while the writer was making bricks at Brickhaven, Va., which was the post office address for the railroad station of Waterloo, Va., a station on the R. F. & P. R. R. opposite Washington, D. C., my father-in-law, who was also interested in the brick works, became interested in the talc industry at Gouverneur, N. Y., at which place there were five corporations doing business, and operating seven mills and about seven mines. Shortly thereafter I was sent for to go to Gouverneur, as my people felt that they had gotten in wrong, and their affairs needed some one to look after them, so I was sent to Gouverneur, and made secretary of the company, which was called the Asbestos Pulp Co. The product was then selling at $10 per ton f. o. b. cars at Gouverneur and the material had to be hauled 13 miles on wagons, from mines to railroad at an expense of $1.50 to $2 per ton, so that it netted the operators at that time about $8 per ton on cars. Soon after my arrival at Gouverneur,

there was talk of amalgamating all the interests in that district, and William J. Arkell, of New York City, took hold of the matter with the idea of merging all the concerns then operating into a new corporation, and in order to force the thing to an issue a deal was made with Mr. A. L. McCrea, jr., who was superintendent and general manager of the Asbestos Pulp Co., to force prices down, for which he was offered $50,000 in cash and a large block of stock in the new company which was to be formed. McCrea cut prices down as low as $5 per ton in the fall and winter of 1892 without any reason for so doing, except to force the operators to come into the combine, and the new company was well under way early in 1893, all of the concerns doing business having joined except the Asbestos Pulp Co., whose board of directors refused to go into the combination on account of finding out about the deal with McCrea and Arkell, so McCrea was forced to sell out his stock to the interests controlled by my friends, and I was made secretary and superintendent of the aforesaid concern, The merger was called International Pulp Co., and all through the year 1893 the price warfare was conducted between this concern and my concern; they were very closely connected with the officers of the new railway that was built into the mines from Gouverneur at that time, and were able to get all records of shipments made by us, so that competition as conducted was most unfair, and in addition to this the International Pulp Co. purchased the mineral rights on the mining property operated by us, in order to make it as unpleasant as possible for us, as they were continually looking for lapses on our part, as they had forced the prices down, and hence taken some of our trade, and it was becoming increasingly difficult to get out the minimum tonnage requir3d under the lease, so that finally in the spring of 1894 we joined the merged companies. A year elapsed and two more concerns were started, and were operating at Gouverneur called Keller Bros. and the Columbian Talc Co., and the writer was selling agent for both concerns from July of 1894 until January 1, 1900, and the same tactics were used by the International Pulp Co., whose president at that time was Col. Augustus G. Paine (deceased), who was also a large owner in a paper mill, and whose contract allowed him to supply his own mills, which were large users of the Gouverneur product. at the lowest price at which the material was sold to others, so that he was not hard to convince that his competitors were selling goods at low prices. Prices which had been raised to $10 per ton on the completion of the merger in 1894 were again slashed to $5 per ton by 1898 and 1899, hence the president of the talc combine was able to save $150 per day for his paper mill. This went on until the two concerns represented by me were forced into amalgamation with one other concern called the American Talc Co., which had in the interim commenced doing business, which merger was completed about 1890 and was called the Union Talc Co., and is still doing business under that name, having been a few years later purchased by the aforesaid International Pulp Co., so that they finally had and controlled all of the producing properties in the Gouverneur district. Each purchase of a property was made the occasion for raising prices, and as soon as they were raised sufficiently to make it profitable for a new concern to start in the business there was always some one ready to build and equip a new plant, and there is now at Gouverneur the plants of the International Pulp Co. as well as the Uniform Fibrous Talc Co., and another new one just being exploited, and during all these years talc was being imported, which brought a much higher price than the domestic; in fact in some cases duty was paid which amounted to nearly as much as the Gouverneur product was sold for, which proves that protection from the outside did not enter into the proposition at all, but that the low prices were the result of lack of knowledge of the business, poor business judgment, and foolish competition among the domestic manufacturers.

In 1902 I became associated with Binney & Smith Co. in the operation of a mine in North Carolina, but the same year had incorporated the American Mineral Co., now doing business at Johnson, Vt., and immediately the same sinister forces were put to work, men were sent from Gouverneur in an effort to annoy us, so I devoted my time to the southern field, putting the works on a fairly good producing and paying basis, when again the same forces were at work in many ways, particularly trying to get our trade, although the product made and sold from the Gouverneur district was entirely different, and suited chiefly for the paper and paint trade, and entirely unsuited to the trade we were catering to; and finding this out eventually they sent a man to North Carolina in an effort to get a property alongside of us; why they did not do it, I never was able to learn, as there were two or three good properties available, unless the owners wanted money for same, and as it had not been the policy of these people to pay out real money, perhaps that stopped them. However, they laid off on North Carolina as far as trying to get hold of properties was concerned.

In the meantime the Vermont talc deposits were being exploited by the Standard Talc Co., at Rochester, Vt., and another at Granby, these two I believe have been merged into the Eastern Talc Co. We had business of nearly 400 cars per year of

coarse talc which we were shipping from North Carolina at $7 per ton f. o. b. cars, same going to the roofing paper trade, and the Vermont manufacturers came in and sold same at $6.50 to $7 per ton delivered in St. Louis, which netted them at that time $2.10 per ton f. o. b. their shipping point. Some of this material was hauled 5 miles on wagons to the railroad, so you can readily see that this killed a portion of our business, as the material could hardly be mined and hauled for the price it was sold at, ground and packed in bags, which cost them at least $1 per ton for the packages, and this was the methods these New England manufacturers used to drive legitimate manufacturers out of business. One manufacturer in Massachusetts, when asked what he meant by selling the stuff so cheaply, replied, "I know I am losing money but I want to prove that there is a market for 40 tons a day, and then I am going to write off half of my expenses, and sell stock" so in this way they have butchered the business. Adventurers, speculators, and novices who have no right to be in the business, and have ruined a perfectly good legitimate business, so as to make it difficult for a legitimate business man, and one who has spent his life in the trade to make a living. The same process has gone on year after year, and generally the years that American talc was selling at the lowest figures in history, foreign talc was paying the highest duty ever assessed, in the interim I started the Alba Mineral Co., at Kinsey, N. C., but after a few years was driven out by water, and so on up to the breaking out of hostilities, having been a manufacturer for 22 years continuously, and one of the chief importers of French and Italian talc for 10 years. At the same time, it became necessary to look for a supply of white talc suitable to take the place of the French and Italian goods, which were becoming difficult to get on account of scarcity of shipping facilities, and having sold out our plant at Glendon, N. C. in May, 1914, to the Talc Products Co., I came to Canada, and took over and developed a prospect here in Hastings County, Ontario; built a mill, which now has a capacity of 60 tons daily, but same was no sooner ready for business, when the same fine Italian hand of the Gouverneur merger appeared, and leased or took an option on the next property but one to us, and in order to keep them from getting too close with a possible chance of their finding talc, we were forced to buy the next property to the one we were operating. So they went ahead and shipped in machinery (which the customs records of both countries will show) put it up, and sunk a shaft, working about a year, and spending I am told about $40,000 in a futile effort to develop something, which was nothing new for them. As all of their properties had been acquired by purchase, never in their history, had they ever added to the world's value by discovery and development. But when the shaft was under way, again we were approached, and asked if we would sell for stock, and when we wanted cash, they asked if we would not lease, and in the meantime the shaft had failed to pan out, so that in November, 1919, they "folded their tents, and silently stole away," while immediately after this propaganda was started, and strenuous efforts were put forth on the ground of patriotism, to get an increase in duty on talc. The services of Mr. Raymond Ladoo of the Bureau of Mines was enlisted, and an association was formed, the chief power behind which is the Gouverneur talc interests, the same ones who tried so frantically in 1919 to open up a mine in Canada, but when they failed suddenly got the patriotic hysteria, and got the manufacturers of low grade or off-colored talc into the association, as they have not sufficient knowledge and experience in the business or its history, to know that the only thing that is wrong with their business is that they do not know it well enough to be in it, in the first place, and in the second, that they are all overproducing that kind of talc, which is such a common article in the United States, that even when it sells below cost, there is always two concerns starting to manufacture it, when one fails or quits, and the better the price the more there is made. There should be a law passed prohibiting the promoting of any more of these concerns, instead of protecting them, as they are engaged in getting the money of the widows and orphans, a good many of them, and the money is hopelessly lost, never to be repaid.

In conclusion will say that there is, roughly, produced in the United States about 250,000 tons of talc, all grades, while the imports are very small and only such stuff is imported as is necessary and impossible to get in the United States on account of the quality, and I presume 20,000 to 25,000 tons will cover the entire importations, so that the only real result of a higher tariff will be the extra burden it will place on the consumer, while giving no protection to the manufacturer whatever, while in normal times of ocean freight rates our export trade from the United States in talc is as great or greater than our imports. Ours is a New York State corporation, operating in Canada, and our taxes and profits are spent in the United States, while the property is owned by American interests.

The writer has been identified with the production of talc in the United States for more than 25 years, and either operated or started three-fifths of the concerns at present doing business in the United States, and all the statements I have made are

true and can be verified by anyone in the business, or by Mr. J. S. Diller, of the Bureau of Mines at Washington, D. C., who has spent many years on this branch of the mining industry. I will be very glad to come to Washington and give you gentlemen a chance to question me.

The only kind of talc imported into the United States are grades not obtainable in the United States, so a tariff protects no one.

H. T. PREDMORE.

NEW YORK, *January 14, 1921.*

I submit herewith to your honorable committee data relative to duties on goods on which hearings have recently been held.

I protest against a higher duty for the following reasons:

Practically all imported talc comes from Italy, France, and Canada, there being only a minimum amount of American talc produced, which is as high in quality or equal in any respect to the imported grades and the quality of this grade is below that of the imported in most respects.

The American talcs do not suffer in competition with the imported, being used for distinctly different purposes, they being peculiarly adapted to certain uses due to their slipperiness, whiteness, and freeness from carbonate of lime. Therefore, manufacturers using imported talcs can not do without them, and a higher duty will advance the cost of their products, which additional cost the American consumer will have to pay.

The present rates of exchange are so adverse to the exporter that the cost of their talc is lower now than it will be when exchange is higher.

CHAS. B. CHRYSTAL.

SCHEDULE B.

EARTHS, EARTHENWARE, AND GLASSWARE.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON WAYS AND MEANS,
Saturday, January 8, 1921.

The committee was called to order by the chairman (Hon. Joseph W. Fordney) at 10 a. m.

BRICK.

[Paragraph 71.]

BRIEF OF FAR WEST CLAY CO., TACOMA, WASH.

MY DEAR MR. HADLEY: A short time ago we took up the matter of the need of tariff protection in the clay products industry with the Hon. Albert Johnson, and he has agreed to speak to you about it and requested that we outline the situation to you personally.

The clay products industry, particularly in the Northwest, is very much in need of higher tariffs on clay products, including all such items as common brick, hollow building tile, face brick, fire brick, flue lining, etc., to protect the manufacturers from very serious competition from Canada, England, and Scotland. Face brick, fire brick, and hollow building tile manufactured in British Columbia are making inroads on the business of clay products manufacturers, both in the Washington district west of the Cascades and the Spokane and Idaho districts. We presume this condition affects clay products manufacturers all along the border between the United States and Canada.

Previous to the war large quantities of Scotch and English fire brick were shipped all along the Pacific coast as ballast for ships coming to this coast to take wheat and other materials to England. It was possible to sell this brick on Pacific coast markets in competition with local products all up and down the coast, and a large quantity of the brick was disposed of. We understand that now more tonnage is available Scotch and English fire brick have again made their appearance on the Pacific coast market.

While we are interested in anything that will do the clay products manufacturers good, we are particularly interested in a tariff on face brick, common brick and hollow tile. The last information we had was that the import duty on all clay products from Canada was 10 per cent ad valorem while the duty into Canada was 35 per cent ad valorem. During the years of 1912 and 1913, when western Canada had a boom, we shipped a considerable tonnage of hollow tile into Vancouver and Victoria in the face of a duty of 22½ per cent. You will understand that this was during a boom, and their local manufacturing facilities were not sufficient to take care of this business. We have not shipped a pound of material into Canada since the war and could not in competition with their local manufacturers.

We are bringing these matters to your attention with the hope that you will see the necessity for adjustment at the earliest possible time.

H. S. WHEELER.

BRIEF OF THE MOSCOW FIRE BRICK & CLAY PRODUCTS CO.

HOUSE OF REPRESENTATIVES,
Washington, Janaury 8, 1921.

Hon. JOSEPH W. FORDNEY,
Chairman Committee on Ways and Means,
House of Representatives.

MY DEAR MR. FORDNEY: In connection with the consideration you are giving to the tariff schedules, I want to impress upon your mind the importance of an adequate duty on fire brick.

There are two small plants producing fire brick located in my home county, Latah County, Idaho, and these plants are in competition with fire brick produced in Scotland, England, and elsewhere where wages and conditions are not at all adequate for the American laborer.

In short, the reasonable demands of the American laborer are such that the manufacturers are required to pay a wage that is far greater than that which is paid by competitors in the countries indicated.

I have a letter now from Mr. J. B. Watson, manager of the Idaho Fire Brick Co., of Troy, Idaho, advising me that laborers in fire-brick companies in Scotland are paid 5 shillings per day, equal approximately to $1.25, as against $5.25 per day paid to American laborers.

My correspondent advises me that fire brick is being sold from foreign countries in the American markets at prices that can not be met reasonably by American manufacturers on any adequate wage scale suitable for American laborers.

Further, my correspondent advises me that Canada has a duty of 22½ per cent on fire-brick goods from the United States, plus a 2 per cent sales tax.

Unquestionably we should meet this proposition by placing an adequate duty upon importations of fire brick from foreign countries.

BURTON L. FRENCH.

MOSCOW, IDAHO, *January 6, 1921.*

Hon. BURTON L. FRENCH, M. C.

MY DEAR MR. FRENCH: I am in receipt of your letter of December 17, 1920, in regard to the announcement of the dates for the hearings in the various schedules, looking to the shaping of tariff legislation.

I herewith outline a statement showing the cost of labor transportation and other items pertaining to the manufacture of fire brick, which will be a guidance to you to have included in the hearings before the Committee on Ways and Means.

Our estimated pay roll averages about 60 cents per hour to the man, which covers salaried employees. It is costing us at present approximately $30 per 1,000 to manufacture fire brick. This does not include our overhead expenses. We are selling our fire brick at $40 per 1,000 f. o. b. Moscow, Idaho. You will readily see that we are selling very close. This is not the only obstacle. We are compelled at times to cut our prices right down to the cost of manufacturing in order to make a sale and compete with our foreign competitors. Under present conditions it is absolutely impossible for us to manufacture fire brick and make expenses if there is not an embargo put on foreign fire brick. There is at present 90 per cent of the fire-brick plants in the West closed down entirely, due to the fact that the fire-brick market is flooded with cheap foreign fire brick.

We have been advised by our agents on the Pacific coast that it is out of the question to sell American-made fire brick in British Columbia, Canada, due to the fact that the Canadian Government has a protective tariff on imported fire brick to the amount of 30 per cent, which makes it impossible to place American fire brick on the Canadian market. In addition, according to the Canadian dump law, we are prohibited from selling fire brick in Canada for less than we sell it in the United States. There is a fine market for fire brick in Canada; but the lid is on so tight that it is impossible to get in. On the other hand, the Canadian fire brick manufacturers can dump their fire brick onto the American market and it is only taxed the small duty of 10 per cent. hence the reason for so many of our fire-brick factories being shut down and hundreds of men out of employment. The same condition applies to the English and Scotch fire brick. There are millions of these bricks dumped onto our market every year at a very small cost in transportation, as the brick are hauled as ballast in returning lumber schooners from England and Scotland to the Pacific coast. Their labor, being so cheap, and the low tariff placed on these brick, puts us entirely out of the game. We ask you kindly to carry out our request to the limit of your ability in putting the lid on tight on foreign fire brick. This will allow the American manufacturer to dispose of his American-made goods which he has in stock and then start his factories.

WARREN TRUITT, *Treasurer.*

BRIEF OF THE REFRACTORIES MANUFACTURERS ASSOCIATION, NEW YORK CITY.

We respectfully petition that item 71 of the present tariff law, which now reads: "Fire brick, magnesite brick, chrome brick, and brick not specially provided for in this section, not glazed, enameled, painted, vitrified, ornamented, or decorated in

any manner, 10 per centum ad valorem; if glazed, enameled, painted, vitrified ornamented, or decorated in any manner, and bath brick, 15 per centum ad valorem," be changed to read: "71. Fire brick, magnesite brick, chrome brick, and brick not specially provided for in this section, not glazed, enameled, painted, vitrified, ornamented, or decorated in any manner, 25 per centum ad valorem; if glazed, enameled, painted, vitrified, ornamented, or decorated in any manner, and bath brick, 35 per centum ad valorem."

We ask this in behalf of the eastern manufacturers of fire brick, members of this association and the following fire-brick manufacturers who are not members, but who join us in this petition: Ostrander Fire Brick Co., Troy, N. Y.; Presbrey Fire Brick Works, Taunton, Mass.; Rogers & Co., Royersford, Pa.

These manufacturers are all located near the eastern seaboard. The bulkiness of their product makes freight charges a determining factor in its distribution, hence their market is confined to the eastern section of the United States and they are compelled to bear the entire burden of competition from the cheap foreign-made brick that have been coming into the eastern part of the country in large volume since the present tariff law was put into effect.

Some of these manufacturing plants are located in or near small towns where they are the principal source of employment. The history of these manufacturing plants shows that it has always been a matter of great difficulty for the owners thereof to earn a return on their investment which would be sufficient to permit of the maintenance of their plants in a proper state of repair and efficiency and unless the protection that is now asked for is granted, a return to normal business conditions will unquestionably bring with it sufficiently large importations of fire brick to work irreparable injury to these American manufacturers and we fear will drive many of them out of business.

The use of fire brick is absolutely essential to the operation of all branches of industry and public utilities. Among the more important of the former can be mentioned the following: Iron and steel (in all of its branches); copper, lead and nickel smelting and refining; building materials, and glass. Among the latter can be mentioned the following: Manufacture of gas for illuminating and heating purposes both domestic and industrial, and generation of electrical energy for both domestic and industrial purposes.

The development of the fire brick manufacturing industry must keep pace with the growth of the steel and metals trade and its prospects for adding to the wealth of the country and furnishing employment to a steadily increasing number of men are marred only by the existing low import rates that permit the natural markets of the eastern manufacturers to be taken away from them.

The amount of capital invested in the refractories industry in the United States is $220,000,000, and the number of men employed is between 30,000 and 40,000. Refractory brick are produced in quantities in about 200 plants throughout the country, located at such points as are convenient to the sources of supply of raw materials or convenient to large consuming markets for the finished goods.

The manufacturers in whose behalf this brief is submitted are called upon to bear the entire brunt of the foreign competition for the reasons previously mentioned; the interior manufacturers are likewise interested in the matter for the reason that such eastern productive capacity as is displaced by foreign product must in turn seek an outlet in fields that would naturally and economically draw their supplies from interior points.

The rapidly changing business conditions make it impracticable to furnish comparable figures between the foreign and domestic products other than the following:

In August, 1920, the Department of Labor published statistics of wages paid in the clay industries in Great Britain, showing that common labor, which furnishes a major part of the cost of the raw material as well as the finished product, was then receiving $15.72 per week. Common labor in the eastern section of the refractories industry at that time was costing 129 to 154 per cent more, ranging from $36 to $40 per week.

In 1913 and 1914, the last normal years for which figures are available, the standard 9-inch fire brick was imported at an average price ranging from $16.60 to $17.10 per thousand. Under the tariff rates that went into effect in 1914, these brick were sold in the eastern part of the United States for $22 to $23 per thousand, compared with domestic prices of $30 per thousand, or 23.3 per cent less than the lowest figure at which American fire brick could be sold.

Importations of fire brick, which come principally from Scotland, England, and Canada, have been as follows:

Item.	Quantity.	Declared value.	Item.	Quantity.	Declared value.
Year ending June 30, 1913:			Year ending June 30, 1914—Continued.		
9-inch (standard size).....	4,085,000	$67,722	Under present low tariff, 9 and 9 inch equivalent.....	5,565,000	$93,149
Larger sizes.....	648,000	28,031		2,059,000	89,926
Year ending June 30, 1914:			Year ending Dec. 31, 1919, 9 and 9 inch equivalent.....	3,333,000	160,673
Under old duties—					
9-inch brick.....	950,000	16,254			
Larger sizes.....	347,000	15,210	Year ending Dec. 31, 1920, 9 and 9 inch equivalent.....		

The 1914 figures show that there was a gain in imports after the lower duties went into effect of approximately 62 per cent over the 1913 rate.

The 1920 figures indicate that as business readjustment proceeds, the volume of imports is rapidly increasing, having gained 61 per cent over 1919 imports.

The act of 1909 levied a duty of $1.25 per ton on fire brick weighing not more than 10 pounds each, not glazed, enameled, ornamented, or decorated in any manner.

The standard 9-inch fire brick, which comprises the bulk of fire-brick sales, has an average weight of 7 pounds. The unit of sales is 1,000 brick, and under the act of 1909 the duty on 9-inch standard fire brick amounted to $3.91 per thousand.

On account of present inflated values of all commodities, a restoration of the duty of $1.25 per ton as provided for in the tariff law of 1909 would be wholly inadequate and we, therefore, respectfully petition that the present method of levying duty on an ad valorem basis be continued, but that the rate be increased as set forth in the opening paragraphs of this brief.

GEORGE A. BALZ, *Chairman*.

LIME.

[Paragraph 73.]

ALFRED W. GRAY, REPRESENTING THE PACIFIC LIME CO. OF BRITISH COLUMBIA, NIAGARA FALLS, N. Y.

Mr. GRAY. I represent the Pacific Lime Co. of British Columbia. I am really representing the Niagara Alkali Co., of Niagara Falls, in representing that company, and other American stockholders, as the Niagara Alkali Co. and other American stockholders who own this company, who reside principally in the eastern part of the country, with the exception of five shares of stock which is necessary to carry on the business as a corporation. All of the stock with the exception of those five shares is owned in the United States.

The Pacific Lime Co.'s plant is located at Blubber Bay, 230 miles north of Seattle, and approximately 900 miles from San Francisco.

It is in a rather out-of-the-way place, and all of its product is practically provided for by its own shipping. It has been operating, or maintaining, vessels to take its own product to the market, which has imposed upon it rather excessive burdens.

Now, this plant was put up there by the Niagara Alkali Co., of Niagara Falls, N. Y., which is engaged in the manufacture of bleaches, and in that work it is necessary to have large quantities of lime.

They are planning to build a plant on the Pacific coast, and just as they were planning to do that the war broke out. And the first step in connection with that plant it was found necessary to obtain a pure lime, and they made a careful investigation throughout that country and they found that the purest lime to be found anywhere on the Pacific slope, or, in fact, in the United States, or any place on the

American Continent, was this deposit, and, as shown by affidavits which I can file, this lime is 99.6 per cent, or practically pure, as against many limes which run large quantities of impurities, so that the purpose of this plant and its development was for our own purposes.

And the war came on, and conditions which have prevailed since made it impossible to go ahead with the development.

I might add right there in connection with the Niagara Alkali Co., of Niagara Falls, consumes or purchases from American producers more lime than it imports from Canada, or is imported by this company, the Pacific Lime Co., so that it is not in any way injuring the lime business of the United States. They are bringing in less than they themselves consume at the present moment, and they ask——

Mr. GARNER (interposing). Did you state that your company at Niagara Falls owned the company in British Columbia?

Mr. GRAY. It purchased that company.

Mr. GARNER. It owns all of the stock?

Mr. GRAY. The company at Niagara Falls and the individual stockholders in the East own all of the stock of the Pacific Lime Co., of British Columbia, of course, with the exception of the five shares.

Mr. GARNER. Do you know, or do you want to state, how much stock is owned by the Niagara Falls Co.?

Mr. GRAY. The Niagara Alkali Co. owns practically all of the common stock. The preferred stock is held for the most part by gentlemen throughout the New England States and New York.

Mr. GARNER. The controlling interest in the British Columbia corporation is held by the Niagara Alkali Co., of Niagara Falls?

Mr. GRAY. The Niagara Alkali Co., of Niagara Falls, owns the controlling interest, the common stock.

Mr. TREADWAY. Does the common stock have the voting power?

Mr. GRAY. They both have voting power.

Mr. TIMBERLAKE. When did they purchase it?

Mr. GRAY. 1913, I think it was.

Mr. HADLEY. Is there any effort whatever upon the part of the Pacific Lime Co. to do business on this side, to produce their raw material for this——

Mr. GRAY. That is the idea.

Mr. HADLEY. And compete with our American producers?

Mr. GRAY. In the way I have stated.

Mr. HADLEY. And the American owners?

Mr. GRAY. In the way I have stated. We are bringing in this lime in part now. Approximately one-third of our lime finds its way into the United States. The rest is sold in British Columbia. There are two lime-producing companies operated there. One with three kilns and our company has five kilns. All of this lime is used in British Columbia and the Western States. None of the lime of the other company has come into the United States until this year, when about 2,000 barrels were imported. Less than one barrel is imported in the West to a hundred manufactured there.

Mr. OLDFIELD. And what are you asking for now?

Mr. GRAY. Five per cent ad valorem.

Mr. HADLEY. On the Canadian or on the American lime?

Mr. GRAY. On the Canadian lime imported into Canada.

Mr. HADLEY. What do our manufacturers have to pay if they export to Canada?

Mr. GRAY. It is 17½ per cent ad valorem duty plus 7½ cents war tax at the present time, which has not yet been taken off.

Mr. HADLEY. How much are you asking for, 5 per cent?

Mr. GRAY. Five per cent; yes, sir. That is our natural territory, the western part of the United States, for the reason that the market in British Columbia is very limited.

Mr. HADLEY. If we were exporting lime into Canada, they would issue an order in council, an order in council would be made the next day making the rate prohibitive where American limes were sent into Canada?

Mr. GRAY. No; they do not have that power under the law. They do not have the power to issue an order in council increasing the rates, but they can reduce it, but they can not increase it.

Mr. OLDFIELD. What you want is that lime for British Columbia to be shipped to New York and the eastern part of the United States free?

Mr. GRAY. Well, we are not asking that it be permitted to come in free. But, with the present rates of exchange, at the present time, with the rates as they are, we can do business.

Mr. HADLEY. Are you aware of the fact that the lime producers along the Pacific coast are practically 80 per cent down and out?

Mr. GRAY. I do not know what per cent, but I know that the State of California is manufacturing between 900,000 and 1,000,000 barrels of lime a year as against less than 50,000 barrels a year brought into the United States by us.

Mr. TREADWAY. You mean that your company brings in 50,000 barrels?

Mr. GRAY. Not to exceed 50,000 barrels this year.

Mr. HADLEY. Do you know what the imports were for last year?

Mr. GRAY. What the imports were?

Mr. HADLEY. Yes, sir. If you have the figures.

Mr. GRAY. It is stated in the reports here. The total imports for the year 1919 were 173,000 units of 100 pounds each. That would be 86,000 barrels.

Mr. HADLEY. Do you know what the value was?

Mr. GRAY. It was $128,000.

Mr. HADLEY. Five per cent duty on that would be $6,000.

Mr. GRAY. The duty here is stated as $6,425.

Mr. HADLEY. Not to exceed one-fifth of 1 per cent was imported?

Mr. GRAY. That is correct.

Mr. HADLEY. So you claim that practically an infinitesimal amount is imported?

Mr. GRAY. Yes; that is my idea. I find, on page 137 of the Summary of Tariff Information furnished, this statement, which is very brief and very illuminating, that we produced in the United States over 99.8 per cent of the domestic consumption, and that less than one-fifth of 1 per cent of the consumption is imported.

Mr. TREADWAY. I would like to ask a question with regard to the statement of Mr. Hadley, which he has just made with reference to the fact that in Washington, Oregon and California the lime producers were down and out.

Mr. HADLEY. I said about 80 per cent, that is my understanding.

Mr. TREADWAY. It occurs to me that if there is only being imported about one-fifth of 1 per cent of the lime which is consumed, that that fact would not have any connection between the importations of lime and the fact that the lime producers of Washington and Oregon are out of business.

Mr. GRAY. I might say absolutely no connection, because when we commenced bringing it in, that condition existed then. That condition in Washington was entirely the result of a war between the Henry Cowan Lime & Cement Co. and McMillan, of the Tacoma & Roach Harbor Lime Co. of Washington.

Mr. YOUNG. I would like to ask you whether or not you have made any calculation as to what the Canadian exchange is going to be in the future? Have you given any thought to that at all?

Mr. GRAY. No; I have not. If it runs as it is now, we can afford to bring in some lime. We wish to be entirely frank with the committee. This year is the first year that we have ever made any profit. We made 4 per cent upon the investment last year.

Mr. BACHARACH. How much was invested?

Mr. GRAY. Three-quarters of a million dollars. That includes the boats. We have had some misfortune and had one boat burn.

Mr. HAWLEY. Have you been shipping to Hawaii?

Mr. GRAY. We did ship some to Hawaii, but the war came along and it was not possible for us to get shipping, and they have built a plant out there and are now manufacturing their lime in Hawaii out of sea shells.

Mr. HAWLEY. You do not expect to ship lime to that market?

Mr. GRAY. This last year we shipped 500 barrels.

Mr. HAWLEY. You are also shipping in British bottoms to San Francisco?

Mr. GRAY. The only British bottom is our own bottom, which we have had to purchase.

Mr. HAWLEY. You are shipping to San Francisco then?

Mr. GRAY. Yes; we brought in—I think I have the last report here which will show exactly what was shipped in. We imported, the Pacific Lime Co.—this will show the shipment to San Francisco from Vancouver, British Columbia, during the past five years up to this time:

The total amount was 97,723 barrels. The average would be 19,544 barrels—19,000 barrels as against the product of a million, or 929,000 barrels manufactured in California.

Mr. TREADWAY. Are you contemplating any expansion of your export trade?

Mr. GRAY. Absolutely not. We are simply waiting to take care of our own business when we can put up a factory on the Pacific coast. In the meantime, we have got to live, if possible.

Mr. HADLEY. You are going to establish your business out in that country, ultimately?

Mr. GRAY. Yes.

Mr. HADLEY. After you have driven the American manufacturers out of business and have established good will in this market, you will raise your business on the American business downfall?

Mr. GRAY. I do not understand.

Mr. HADLEY. I assume, as the facts are as I understand this business, that is exactly what will happen.

Mr. GRAY. Oh, no; we are purchasing more lime than we are bringing in. We do not wish to bring lime into California, Oregon, or Washington, and sell it below the market price. As I say, the plant at Niagara Falls uses more lime than we bring into the United States.

Now, I might read to you from the report of the Department of the Interior of the United States in 1917, and so far as I have been able to find out it is practically the same, since that shows that the State of California produced 990,000 barrels of lime that year. In addition to that there was shipped out of the State 1,897 tons, the Pacific Lime Co. shipped into California during that year amounted to 1,106 shipped into California less than California shipped elsewhere.

The States of Washington and Oregon and Idaho ordinarily consume in the year 30,464 tons. In addition, they shipped out 19,361 tons, or approximately 50,000 tons were produced in the States of Washington and Oregon and Idaho.

The Pacific Lime Co.'s shipment into Washington and Oregon and Idaho during that year amounted to 2,955 tons, so that there were shipped into those States less than one-sixth as much as those three States shipped elsewhere.

So we can not be cutting in on their preserve very much.

I have an affidavit here which I would like to file showing the purity of our lime, and showing that we are not cutting into anyone else's business. We have never dumped a barrel of lime into those States, if you mean by dumping selling at a price less than the cost, or less than the market in the country in which it is placed. In other words, we have never cut the price any place in the United States. We ordinarily charge 5 cents a barrel more. Our lime is pure lime and we can get a little bit better price where our lime becomes known.

Then, too, our freight charges are very high in the shipment of lime. The insurance rates are especially high, as lime is a very dangerous product to ship on account of the fact that if it gets wet it will set fire to the boat. That is the way one of our boats burned this year.

Our lime, as I stated a while ago, is 99.6 per cent against some that is shown in this report here of the Government, in many instances having 45 per cent impurities. So it is particularly valuable, especially for such things as the spraying of fruit trees. Those of you gentlemen who are familiar with the spraying of fruit trees know that the apparatus is always getting clogged. That is because of the fact that a good deal of the material in the lime is insoluble. Our lime is 99.6 per cent soluble in water, so that instead of the agriculturist or the horticulturist having to stop his gang of men while spraying his fruit every little while in order to clean out the apparatus, he can go right along without that interruption.

But, of course, the average person using lime does not know the difference. To 99 out of every 100, lime is lime. They do not know the difference in the grades of lime. Few people know it. Those few that we have been able to reach will buy our lime in preference to the impure lime.

Of course, the bulk of our material has got to be shipped a long distance in order to get to the market at all.

I might say that last year we lost $19,000, and we lost every year up to last year. On account of the saving in exchange which has been in our favor this year we have made a little profit, viz, 4 per cent on our investment of three-quarters of a million dollars. The exchange is still favorable to us; three months ago it was 8 per cent. It is a little more favorable to us now than it was then and is about the same as it was six months ago.

Now, if I may file this affidavit and some statements showing the use for which our lime is beneficial, I will be glad to do so, and then I will file a brief later to answer anything that may come up.

Mr. TILSON. From what source does the lime that is imported into this country come?

Mr. GRAY. Ninety per cent of it comes from Canada.

Mr. TILSON. How large a portion of this 90 per cent comes from your concern?

Mr. GRAY. About half of it.

Mr. TILSON. So that of the amount used in this country your importations are about what?

Mr. GRAY. About one-tenth of 1 per cent.

Mr. TILSON. Less than one-tenth of 1 per cent?

Mr. GRAY. Yes, sir; less than one-tenth of 1 per cent; as I have the figures, I might say that the United States exports five times as much into Canada as it imports from Canada, according to the Government report. The Government records are all that I have on it. It says here that the imports do not exceed one-fifth of 1 per cent of the domestic product. The exports are less than 1 per cent of the product, and 90 per cent of that export goes to Canada. In other words, there is five times as much going into Canada as there is coming this way.

Mr. GREEN. About 50,000 barrels, I think.

Mr. GRAY. About seventy to eighty thousand barrels.

The CHAIRMAN. Mr. Gray, you have consumed your time, you may file a brief.

Mr. GRAY. May I make just one statement with regard to the imports. There were imported into the United States in 1908 231,000 units of 100 pounds each, and in 1918 the list gives that year as 147,000 units, or a little more than half in 10 years has been the decrease in the amount of lime. It has been decreased about one-half.

(The papers referred to are as follows:)

STATE OF CALIFORNIA,
City and County of San Francisco, ss:

Edward H. Horton, being first duly sworn, deposes and says: That he is the representative of the Pacific Lime Co. (Ltd.), of Vancouver, B. C., for the sale of their lime in the State of California and for the export trade, and as such representative is thoroughly familiar with the lime situation on the Pacific coast, and is in a position to make the following statements:

The lime manufactured by the Pacific Lime Co. (Ltd.), of Vancouver, B. C., at their plant at Blubber, B. C., is preferred and used by the most important of the leading industries in central California on account of its "purity," which makes it available for general use in horticulture, agriculture, building construction, chemical, and other industries.

Pacific lime is made from a "uniformly pure, high calcium limestone," an analysis of the lime shows:

	Per cent.
Silica and insoluble matter	0.27
Iron and alumina	0.14
Calcium oxide	99.59
Magnesium oxide	Trace.

In horicultural industry the Pacific lime is being used in California by the leading manufacturers of lime-sulphur spray by such concerns as the California Rex Spray Co. at Benicia, California Spray Chemical Co. at Watsonville, and many others that manufacture lime-sulphur spray solution for spraying fruit trees.

They prefer Pacific lime because it makes a stronger solution, it will not precipitate while in solution, it has no grit to cut the plunger packing, valves, and nozzles of the pumps and hose.

The lime made in California by the leading manufacturers will precipitate while in solution, is full of grit, and therefore not desired by the lime-sulphur spray industry.

There are millions of fruit trees in central California that are sprayed several times during every winter and require spray material made of the purest of lime in order to have the spray after having been applied stick like paint and insure permanent work.

Spray solution made of California lime will wash off with the first rain, due to the fact of large content of Silica found in the limestone (from which the lime is manufactured) and the manner in which the lime disintegrates in burning.

In the agricultural industry the Pacific lime is extensively used for soil purposes on account of its purity. It is also extensively used for the whitewashing of barns, buildings, and fences for the same reason as named for spraying purposes.

In building construction Pacific lime is used for brickwork and plastering and is preferred on account of its being free of grit, making a smooth putty.

Being pure lime it will not pop or pit in the wall.

In the chemical industry it is extensively used on account of its purity and the small amount of residue by such companies as the Standard Oil, Shell Oil, Associated Oil, varnish manufacturers, etc.

The users of Pacific lime acknowledge it to be of superior quality but demand it at the ruling price of other leading limes.

A lime shortage has occurred several times in California and had it not been for the Canadian lime, which came in by water, the California trade would have suffered severely for a considerable period of time.

In conclusion, for a general statement of the facts connected with the sale of Canadian lime in California respectfully refer you to my letter to Mr. E. D. Kingsley under date of December 14, 1920, which is made a part of this affidavit, a copy of said letter being hereto annexed, which is true to the best of my knowledge and belief.

EDWARD H. HORTON.

DEAR MR. KINGSLEY: Having read the pamphlet entitled "Hearings Before the Committee on Ways and Means, House of Representatives, July 18, 1919," on the subject of lime, I find the statements contained therein so far from the facts that I have concluded to give you what I know about this story.

I represented the Tacoma & Roche Harbor Lime Co. for the San Francisco trade from the spring of 1909 until the fall of 1917, when said company withdrew from the California market on account of their bad financial condition.

The last time that I was at Roche Harbor was in May, 1913, when Mr. John S. McMillin went into detail with me about the financial condition of his company. Before I left there he gave me a copy of his 1912 balance sheet, which showed his company to be very heavily in debt. He asked me to see my bankers on my return to San Francisco and try and borrow $25,000 for his company, as he was pressed for money and must have it. On my return I took the matter up with Mr. F. L. Lipman, manager of the Wells Fargo Nevada National Bank, and he turned down the request for a loan of any money to the Tacoma & Roche Harbor Lime Co. without security.

The steamer *Archer*, owned by the Tacoma & Roche Harbor Lime Co., was so badly damaged off the California coast in 1915 that they disposed of her hull for about one-tenth of her cost, which resulted in a large financial loss to them, and from that time on they had but one vessel, the schooner *W. G. Irwin*, left to transport lime from Roche Harbor to San Francisco, and as she only made infrequent trips, bringing about 4,200 barrels per trip, we were left with an empty warehouse most of the time.

With the full know edge and sanction of McMillin, in the fall of 1915 I arranged with the Pacific Co. (Ltd.), of Vancouver, British Columbia, to supply us with their Pacific lime, which they did when able to get transportation for it (it was not very frequent), and the lime had from them was stored in the Tacoma & Roche Harbor Lime Co.'s warehouse in this city. W. C. Reveal had charge of the warehouse and the filling of country orders, and as he had none of the Roche Harbor lime in stock, considerable of the time those orders were filled with Pacific lime, and he wrote customers they would find it equal in quality to the Roche Harbor.

I ordered the Pacific lime and paid the invoices received from the Pacific Lime Co. (Ltd.), and the T. & R. H. L. Co. paid me for the lime.

In the late fall of 1917 Mr. McMillin came to San Francisco and while here told me that he needed money very badly and that he would have to withdraw from the California trade, and while here he wound up his lime affairs connected with his warehouse and sold the building to me (the building was on leased ground). While here he disposed of the schooner *W. G. Irwin* at far below her real sale value at the time; he said that he was obliged to do it as the bank in particular was pressing his company for money. His only means of getting money at the time was the sale of the *Irwin*.

Following the withdrawal of American ships from the Pacific coast in 1914 shipments of lime from Puget Sound ports to the Hawaiian Islands ceased; no transportation for lime could be had on any line. The outcome of it was that a lime plant of 30 tons daily capacity was built at Waianae, near Honolulu, to burn sea shells and coral, which ever since then has taken care of the principal requirements of the Hawaiian Island demand for lime. The lime plant referred to turns out daily 12 tons sugar-mill lime and 18 tons field lime. The mill lime, figuring 9 barrels net lime to the ton, gives a production of over 35,000 barrels lime per annum, which has taken the place of just that much Roche Harbor lime. The Waianae lime is ground and packed in barrels each holding 225 pounds net lime and sold at a price far below what any lime can be imported for from the Pacific coast.

T. H. Davies & Co., of Honolulu, are reported as the owners of the plant referred to. They purchase its supplies, etc.

From the above it can readily be seen that lime manufactured by the Pacific Lime Co. (Ltd.) has not had anything to do with the loss of trade on the Hawaiian Islands of Roche Harbor lime.

For a great many years past Davies & Co. have had the exclusive agency for the Hawaiian Islands for the sale of Roche Harbor lime, which has been used mostly by the sugar mills and sugar plantations. Their purchases of Roche Harbor lime previous to the breaking out of the European war in 1914, amounted to a great many thousands of barrels of lime per annum, the most of which was lost to the T. & R. H. L. Co. from lack of transportation facilities previously referred to.

Since the resumption of transportation the past year or so between Puget Sound ports and the Hawaiian Islands Davies & Co. have only purchased small lots of lime monthly from the Roche Harbor Co., for the reason that they are getting their main supply from their own plant.

Since transportation has been resumed from Puget Sound lime that was formerly shipped from San Francisco to the Hawaiian Islands the greater portion of it has been taken over by the Orcas Lime Co., of Seattle, who have been selling their lime to dealers at the points referred to at a price far below that which has been offered by others; the best evidence is their books. For 1920 they contracted with one concern for a full year's supply at less than the market price ruling at the time in Seattle or San Francisco. They have offered on a contract for 1921 delivery of their lime to the Seattle dock at $2.30 per barrel against the market price quoted by others in Seattle of $2.60 per barrel.

Out of some 15,000 to 20,000 barrels of lime shipped during this year of 1920 from Seattle and San Francisco to Hawaiian Is and ports not more than 500 barrels of said lime was made by the Pacific Lime Co. (Ltd.), of Vancouver.

British Columbia, and that small lot was shipped by me from San Francisco at the market price at the time of shipment from San Francisco.

The competition of the Roche Harbor lime in the Northwest for shipment from Seattle to the Hawaiian Islands is entirely with the cut prices sold at by the Orcas Lime Co., who have their kilns on Orcas Island (near Roche Harbor).

From various conversations had with Mr. McMillin, of the Roche Harbor Co., I have learned that he has for several years held his lime at a good price in the Northwest and for export, and the manager of the Pacific Lime Co. (Ltd.), has told me that they have not cut the prices set by McMillin, which has always been considerably higher than sold at by others.

As the California representative of the Pacific Lime Co. (Ltd.), will say that I have sold their lime at the highest market price that has at any similar time been obtained by any of the San Francisco or Los Angeles manufacturers or any other lime company doing business in California. My books are the best evidence as to the fact.

The Roche Harbor Lime Co. once had some business in Peru, which they lost because they could not fill the orders when the lime was wanted by the exporters. This remark refers to orders that have come from South America since the closing of the European war. Shipments of lime from Pacific coast lime plants to South America have never been of more than what would be considered as of small volume, so no lime company on the Pacific coast has had very much to gain or lose.

The statement of the Puntenney Lime Co. is not based on facts. They have never had to compete with Canadian lime at low prices; their San Francisco agent took considerable trade away from me by cutting the price of their lime in central California.

The statement of T. J. Fleming is not based on facts. His statement regarding duty on Canadian lime is incorrect and the receipt of 10,000 barrels of Canadian lime in San Francisco in May, 1920, is also incorrect.

It is a well known fact of the lime men in San Francisco and Los Angeles that for several years Fleming's company cut lime prices to such a low figure that it resulted in the closing down of several lime plants in the southern part of this State for a considerable period of time; to meet their prices would have entailed considerable loss.

During this year 1920 one of the prominent lime men from the southern portion of this State called at my office, and during the conversation had with him he said that Fleming's lime company several years ago cut the price of bulk lime from the prevailing market price of $10 down to $7.50 per ton to try and break the Blue Summit Lime Co., of Tehachapi, and kept his cut price going for some two and one-half years, taking the bulk of the business away from the lime companies doing business in southern California; that when he had gained his point and had the business he then advanced his price to $10 per ton. He further said that during the time the cut price was going on that all of Jamieson's kilns at Tehachapi were kept closed down, he buying his lime (to run his mortar plant with at Los Angeles) of Fleming for less than he could make it for.

The same party further said that the Arizona lime companies at their plants employ mostly Mexicans and Indians.

EDWARD H. HOSTON.

MOUNTAIN VIEW, CALIF., *September 2, 1920.*

GENTLEMEN: We understand that certain parties have been trying to enact legislation at Washington, D. C., in the way of increasing the present duty on British Columbia lime into the United States, and their fight has been waged particularly against the lime manufactured at Blubber Bay, British Columbia, by the Pacific Lime Co. (Ltd.), of Vancouver, British Columbia.

Our trade is very partial to the Blubber Bay lime, and if we should be deprived of getting it the fruit growing and building industries would be the sufferers.

THE MINTON CO.,
Per E. D. MINTON.

SAN JOSE, CALIF., *September 2, 1920.*

GENTLEMEN: We understand that certain parties have been trying to enact legislation at Washington, D. C., in the way of increasing present duty on British Columbia lime into the United States, and the fight has been waged particularly against the lime manufactured at Blubber Bay, British Columbia, by the Pacific Lime Co. (Ltd.), Vancouver, British Columbia.

During the past year or more we have been handling considerable of your lime, and it has proven very satisfactory to our trade. We wish to say that if we should be deprived of getting it, both building-material men and fruit growers as well would be the sufferers.

BORCHERS BROS.,
By R. H. BORCHERS.

SEPTEMBER 3, 1920.

GENTLEMEN: It has been called to our attention that certain parties have been trying to enact legislation at Washington, D. C., to have an increase of duty on British Columbia lime coming into the United States.

As our trade is very partial to this lime, we feel that an injustice would be placed upon the building industries and public by any increase in duty having a tendency to remove this lime from the market, and hope that you will take the necessary steps to bring this matter to the attention of the proper authorities, that they may become familiar with the situation.

WISNOM LUMBER CO.,
By JOHN WISNOM.

CUPERTINO, CALIF., *September 14, 1920.*

GENTLEMEN: We understand that certain parties are trying to have legislation enacted at Washington, D. C., to have the present duty on British Columbia lime shipped into the United States increased, and that they particularly are endeavoring to have the lime manufactured at Blubber Bay, British Columbia, handicapped by said increased duty. We wish to say that this is an extensive orchard district and that our fruit growers have learned by experience that Blubber Bay lime is superior to all other lime for use in spraying fruit trees, hence we would very much regret to see an additional tariff placed on this lime, as it imposes an added expense on the fruit growers of California, who are already greatly handicapped in the matter of expense.

THE CUPERTINO STORE (INC.),
A. WILSON, *Manager.*

FRESNO, CALIF., *March 16, 1920.*

GENTLEMEN: We have had a car of lime ordered from you for some time, but as yet we have not received a notice of this shipment.

It is very unsatisfactory to work up a trade on lime and then not be able to get the lime. Years past we handled Roche Harbor lime extensively, but it was necessary for us to stop handling it entirely because their shipments became so irregular that we could not handle it.

We hope that you will not get in such a position with your shipments, as we your lime.

C. S. PIERCE LUMBER CO.,
By FRANK F. MINARD, *Secretary.*

FRESNO, CALIF., *March 16, 1920.*

GENTLEMEN: When are we going to be able to get some Blubber Bay lime?

We have worked up a nice trade on this product at the sacrifice of other wood-burned limes, and now we can not get your lime or anybody elses'. We should think that the people who furnish you with this lime would see the necessity of keeping you supplied with an adequate stock to take care of your trade. The quality of your lime is excellent, but to be frank with you, the uncertainty of deliveries is very unsatisfactory.

Will you be kind enough to advise how much dependability we can place on future orders?

VALLEY LUMBER CO.,
By W. K. KENDRICK,
Sales Manager.

REEDLEY, CALIF., *March 11, 1920.*

GENTLEMEN: We are in receipt of yours of the 9th in which you have once more made the statement that you are out of Blubber Bay lime and we are very sorry to hear it because we need a carload of it right now from which to fill orders that we have recently taken for it.

It seems to us that you should be able to connect up with some of the various steamship companies to bring you a stock of fresh lime every month so that your customers could depend on getting it from you when they need it. It makes it very bad for us selling your Blubber Bay lime ahead and then receiving a letter saying that you are out of it.

Everyone throughout this section prefers your lime to any of the other limes offered for sale in California for the reason that the Blubber Bay lime is generally free of core and when slaked for putty it works so smooth and nice. Your Blubber Bay lime is the only kind that we have been able to get that is perfectly satisfactory for making spray and whitewash. There are large quantities of lime used throughout this section for making spray material for use in the orchards about here.

WESTERN LUMBER CO. (INC.),
J. J. EYMANN, *Manager.*

CHICAGO, CALIF., *March 17, 1920.*

GENTLEMEN: Replying to yours of the 15th we regret to advise that it is impossible to wait until April 1 to get our requirements of lime, and owing to inability to get Blubber Bay lime in time it has been necessary for us to order three carloads of other lime to take care of our trade.

You probably will remember that we have been boosting Blubber Bay lime to our trade for spraying purposes and whitewashing barns, fences, or other buildings. For the past year and a half we have talked Blubber Bay lime and educated our trade to call for it, but as they simply must have some good lime and we are unable to obtain Blubber Bay then we have to do the next best and take whatever lime is available.

You should keep us well advised as to the lime outlook, so that we may put in sufficient stocks to have lime at all times, but as we feel that this is impossible, perhaps it will be best for us to carry two or three kinds of lime, thus having more than one source for our supply, so we may not be out of lime and let our trade suffer.

Kindly advise us as near as possible what we may expect on future shipments of lime; and can you not arrange to notify us in ample time, so we may get two or three carloads of lime for stock in case we need it, whenever you are likely to run low. You know that we are serving a good trade and have boosted Blubber Bay lime and would like to know that we are going to be taken care of, so we will not have to have several kinds of lime at one time. You know how it is talking one product to get your trade educated and then you send them something else, and even though a better product, they think it is a substitute on which we make more profit.

We are not saying that the other lime is better than Blubber Bay, for if it was we would probably be talking the other lime, and we will say that Blubber Bay is a good lime, very satisfactory to the trade, and the only complaint we have is that we are not being taken care of properly, and we hope that you can induce the manufacturers to make better shipments of lime, and in case you can not do this will you keep us informed so our stocks will not again run out.

THE DIAMOND MATCH CO.
By C. G. WOLOHEN.

SANTA CLARA, CALIF., *January 24, 1920.*

GENTLEMEN: In answer to your letter of recent date asking for my opinion of your Blubber Bay lime will say that it is the only lime that I know of in California that is to be had for many of the purposes that we want lime for use in this section. There is no lime that we know of that is considered the equal of your Blubber Bay lime for making spray for the spraying of fruit trees, of which we have thousands of acres of them in this section. The big canneries around here use your lime for making whitewash to paint their buildings, both inside and outside. The farmers also use your lime for making whitewash to

paint their buildings and fences with. For spraying and whitewashing Blubber Bay lime is far superior to the California lime because it sticks like paint on the bark of trees as well as any other surface that is sprayed or painted with it. Then, again, when it is thoroughly dry it will not rub off, which we can not say for any of the other limes. I hope that you will keep a good stock of it on hand so there will be no delay in getting it from you when I am in want of it.

B. F. ROLL.

SAN MATEO, CALIF., *January 22, 1920.*

GENTLEMEN: In answer to your recent letter wanting our opinion of Blubber Bay lime would say, to begin with it costs more than the California lime, but is given the preference throughout this section over all others by the bricklayers and plasterers, who claim that it works smoother and makes a better job.

There are many fine plastering jobs coming up soon about here and there will be a good demand for your lime, so be sure and keep a good stock of it so that we can get it at all times as we will probably want considerable of it during the year.

SAN MATEO PLANING MILL CO.,
By WALTER ANDERSON.

SAN JOSE, CALIF., *January 29, 1920.*

GENTLEMEN: In answer to your letter of recent date we are pleased to give you our opinion of the good qualities of your Blubber Bay lime, and they are as follows:

It is superior to the California limes, and for spray and whitewash material it has no equal. It has the body and will stick like paint; the rain does not wash it off like it does the California limes. It is in good demand in this section and very well liked for orchard and farm, as well as for all building purposes.

Hope you will keep a good stock of it on hand as our trade prefers it and if deprived of getting it when needed it will work a great hardship on our customers whom we want it for.

You may book our order for 400 barrels of Blubber Bay lime. Ship 200 barrels of it at once and the balance in a week or so later, thus obliging,

WILLIAMS & RUSSO,
By JOSEPH RUSSO.

SANTA CLARA, CALIF., *January 15, 1920.*

GENTLEMEN: I wish you would please ship that car of Blubber Bay lime that I ordered, because the spraying season is now on and we are very badly in need of it.

We are having daily calls for the B. B. lime, which we must have because our customers can not use the California limes for spraying purposes.

I will want another carload of your lime soon, as there are thousands of acres of fruit trees in this section to be sprayed.

F. W. STEWART.

SEATTLE, WASH., *January 20, 1920.*

DEAR SIR: We are in receipt of information that your competitors in the lime manufacturing business in the West are urging upon Congress an increase in customs duty on Canadian lime.

We should be sorry to see any increase considered by that body that would have any tendency toward keeping your lime from reaching this market, as we feel that your product (Pacific lime) is necessary here.

In the building construction of this city Pacific lime is considered a standard, and as it is never sold at a cut price and pays a 5 per cent duty, it should be considered fair competition with the local brands of lime.

We hope you will be entirely successful in refuting any statements of your competitors that would in any way tend toward keeping Pacific lime from the Washington market.

SAM HUNTER CO.,
By SAM HUNTER.

NORTH YAKIMA, WASH., *January 3, 1920.*

DEAR MR. KEITH: I think that possibly you might be interested in knowing the results which we have had with Pacific lime for the manufacture of spray.

I will say that we have found it very satisfactory indeed, and the business policies of your company have always been excellent. For the manufacture of spray purposes, there are only two limes on the Pacific coast which are at all worthy of consideration, yourself being one of them.

We are always hoping that it will not be possible that a duty upon your lime will be placed which will exclude you from the market, as it will be a very severe handicap to our own business interests.

While there are lots of competitors in our own respective line, at the same time we are quite an essential part of the fruit industry. Your lime is efficient for our work and is economical for our use, and we expect to keep on using it for some little time.

YAKIMA REX SPRAY CO.

PORTLAND, OREG., *January 8, 1920.*

DEAR SIR: We have received information that your competitors in the lime manufacturing business in the Northwest are urging upon Congress an increase in customs duty on Canadian lime.

We should be very sorry to see any increase considered by the Ways and Means Committee that would have any tendency toward keeping your lime from reaching this market, as we feel that your product is necessary here.

Besides our building material business, we have established a considerable business in lime for the manufacture of fruit-tree spray, and for this class of work Pacific lime is considered a standard. We believe the orchardists of the Northwest are as much entitled to consideration as the interests of the lime manufacturers.

We hope you will be successful in combating any work of your competitors before Congressional committee that may tend toward shutting your product out of the Oregon market.

THE J. MCCRAKEN CO.,
H. S. MCCRAKEN.

SAN MATEO, CALIF., *January 22, 1920.*

GENTLEMEN: In answer to your recent letter wanting our opinion of Blubber Bay lime would say, to begin with, it is given the preference throughout this section over all other limes by the bricklayers and plasterers who claim that it works smoother and makes a better job.

There are many fine plastering jobs coming up soon about here and there will be a good demand for your lime, so be sure and keep a good stock of it so that we can get it at all times, as we will probably want considerable of it during the year.

SAN MATEO PLANING MILL CO.,
By WALTER ANDERSEN.

MOUNTAIN VIEW, CALIF., *January 26, 1920.*

GENTLEMEN: In answer to your letter of January 22 as to why we buy the Blubber Bay lime in preference to any of the California burnt lime, our answer is that in this section of the State there are hundreds of thousands of fruit trees that need to be sprayed with material made with lime that will stick to the bark of the trees and not wash off the first time that it rains.

For the same reason, as noted above, it is also wanted for whitewash for buildings, fences, etc.

It makes the very best spray and whitewash, because it will not (that is, the lime will not) precipitate while in solution.

We wish that you would please ship to us as soon as possible a carload of 200 barrels of your lime, as we are badly in need of it.

MINTON LUMBER CO.,
By E. F. MINTON.

CALIFORNIA SPRAY-CHEMICAL CO.,
Watsonville, Calif., February 18, 1920.

GENTLEMEN: Replying to your letter of the 17th instant, beg to state I think it would be of importance for your company to maintain a stock of lime in San Francisco, as your quality of lime is exceedingly good.

We are in the market from time to time for lime, and would be pleased to have an available stock of your lime on hand to draw from.

E. E. LUTHER, *General Manager.*

FRESNO, CALIF., *March 4, 1920.*

GENTLEMEN: We regret that you are out of Blubber Bay lime as we are badly in need of a car of it at this time and depended upon getting it from you to fill some of our orders that are waiting for it.

Our customers like your lime because they can depend on it turning out good work for them. As the Blubber Bay lime is very pure it works very smooth under the trowel, therefore a labor saver.

Why don't you try and arrange with some of the steamship companies to bring you the lime every month, so that you can depend upon having it in stock at all times? This is merely a suggestion on our part; we know that you can get the business and hold the trade with your lime, providing you keep a supply of it on hand.

M. KELLNER & SON LUMBER CO.,
Per S. B. KELLNER.

FRESNO, CALIF., *March 5, 1920.*

GENTLEMEN: We regret that you can not ship us a carload of your Blubber Bay lime at this time as we need it badly for our trade, who have been using it and like it much better than the California lime.

We have sold quite a number of carloads of your lime in the past year and have found it a very satisfactory lime to handle. Our customers say that it has a good body to it and that they can depend on doing good work with it; that it is lime that answers the purpose for everything that lime is wanted for.

Why don't you have the Pacific Lime Co. make arrangements with some transportation company to bring you regular monthly shipments of their Blubber Bay lime so that you will always have it in stock so that we can depend on getting it from you when we need it?

ROUTT LUMBER CO.,
Per VIRGIL S. ROUTT.

Mr. HADLEY. I wish to insert in the record a copy of a letter from the Chamber of Commerce and Commercial Club of Seattle under date of January 3, 1921, a letter dated December 6, 1920, addressed to the board of trustees, Seattle Chamber of Commerce and Commercial Club; a letter addressed to the board of trustees, Seattle Chamber of Commerce and Commercial Club, signed by C. H. Hanford, acting chairman, National Affairs Bureau; a letter from the Orcas Lime Co., of Seattle, dated January 3, 1921, addressed to me, and a telegram addressed to me from Hurley Mason Co., Booker, Kiehl & Whittle.

SEATTLE CHAMBER OF COMMERCE AND COMMERCIAL CLUB,
Seattle, January 3, 1921.

DEAR MR. HADLEY: Supplementing our telegram of December 21, in which we said "Washington lime manufacturers need protection against Canadian competition," we are inclosing herewith the text of the reports of the Industrial and National Affairs Bureaus, approved by the board of trustees December 21, 1920.

We are also transmitting a brief or statement of fact on the subject prepared by Mr. John S. McMillan, who is a pioneer lime manufacturer of the Northwest, setting forth the reasons why American lime manufacturers require protection, and presenting specific facts.

ROY O. HADLEY, *Secretary.*

SEATTLE, WASH., *December 6, 1920.*

To the BOARD OF TRUSTEES,
Seattle Chamber of Commerce and Commercial Club.

GENTLEMEN: The lime manufacturers of Washington have protested to the Industrial Bureau of the Chamber of Commerce against the competition to which they are subjected as a result of national legislation.

Our laws forbid Washington manufacturers from hiring contract coolie or other oriental labor. This labor is to a large extent used in the lime quarries and industries of British Columbia. The laws of the United States do not forbid the shipment into this country and sale of the products of coolie contract labor from British Columbia, and the only protection which Washington lime manufacturers have against this competition is the 5 per cent duty on lime products from British Columbia.

After investigation of this complaint, the Industrial Bureau Executive Committee, at its meeting December 2, voted to recommend to the board of trustees that steps be taken through this organization to place the Washington lime manufacturer on a more equal basis of competition with British Columbia firms.

It was recommended that the trustees be requested to urge our Washington delegation in Congress to take immediate steps looking to an increase in the tariff on lime products from British Columbia to a point where the Washington manufacturers will be able to compete with British Columbia concerns.

A. S. DOWNEY,
Vice Chairman, Executive Committee, Industrial Bureau.

Referred by the board of trustees December 7, 1920, to National Affairs Bureau.

To the BOARD OF TRUSTEES,
Seattle Chamber of Commerce and Commercial Club.

GENTLEMEN: The National Affairs Executive Committee herewith returns with its indorsement the recommendation from the Industrial Bureau that Congress be urged to take immediate steps to increase the tariff on lime products from British Columbia.

It is suggested that a telegram be sent to the Members of Congress urging, if possible, the incorporation of lime in the emergency tariff bill.

C. H. HANFORD,
Acting Chairman, National Affairs Bureau.

Approved by the board of trustees, December 21, 1920:

ROY O. HADLEY, *Secretary.*

THE LIME AND LIMESTONE INDUSTRY.

The lime and limestone industry of Puget Sound, already bled white by the destructive effects of the war, is now threatened by complete ruin. It can be saved only by prompt and adequate protection by Congress.

This result has been accomplished by the most unjust and discriminatory industrial, commercial, and tariff conditions.

This is one of our basic and most important industries. Its various plants have contributed largely to the building of Seattle and of all other cities of the Pacific Northwest and of this coast. It represents millions of invested capital and a generation of effort and labor. Its product is of the highest quality for all purposes and is unsurpassed in the entire world. Plants had been developed sufficient to meet every domestic need under the most active building conditions, and any growth in future demand had been amply provided for. Prior to the war a promising export trade had been developed, which was of value both to the producers themselves and to the entire country.

Under these conditions there has not been, there is not now, and there could not be any need whatever for any importation of limestone or of its products

to supply any market whatever on Puget Sound, in the Pacific Northwest, or in the United States anywhere.

For several years, however, our markets have been overrun by lime and limestone from British Columbia, Canada, often at a slaughter of prices and under circumstances of the grossest injustice to our own people and to all our industrial and commercial interests.

Labor.—For many years this industry has been manned and operated in British Columbia either exclusively or largely by Chinese and Hindu labor at a scale of wages from 25 per cent to 50 per cent lower than the American standard at the same time in the same industry. This applied to all departments of production, including the quarrying of the stone, the burning of the lime, the preparation of the fuel, the making of the barrels, and to all other work about their plant. That class of labor was not available for the American producers, and public sentiment would have precluded its use even if it had been available.

Discrimination of import duties.—Under our present revenue law raw limestone is admitted absolutely free of duty, while manufactured lime pays an import duty of only 5 per cent ad valorem. This schedule was adopted over the futile objection and protest of our producers who foresaw its serious menace to them because of the great difference in costs due to their cheaper labor.

This law opened wide the door of our markets to the products of that cheaper labor, and they promptly entered it.

At about the same time that our present law was enacted a Canadian tariff law was also passed for the express purpose of closing the doors of their markets against all possible competition from the United States. It successfully accomplished its intended object.

Under their law our producers, paying the American rate of wages, are met at the boundary by an import duty into British Columbia of 15 per cent to 30 per cent on raw limestone, of 17½ per cent on manufactured lime and of 17½ per cent on the value of the package containing same. Even these rates may be increased at any time by a simple ex parte "order in council," and that action has been threatened if it were found that the present rates did not exclude competition.

This law absolutely and purposely excluded our producers from all British Columbia markets, while our law invited their producers to flood our markets with the surplus product of their cheaper labor.

Made legally impregnable at home against any retaliation, they had already waged a most disastrous warfare upon our markets when the great World War came on.

Effects of the war.—The immediate effect of the war upon our home producers was the prompt elimination of all their export trade by the commandeering and demoralization of shipping and the abnormal increase in freight rates. The same conditions also eliminated them from the domestic markets of California and Hawaii.

In all their home markets building operations were reduced to the minimum and there has been but the slightest revival in that home demand up to the present time.

As a result, since the beginning of the war the quarries and the lime plants of Puget Sound and throughout the entire Northwest have been standing from 60 per cent to 80 per cent inoperative and are to-day at least 80 per cent idle. In some of the important plants the output dropped to 10 per cent of their prewar production.

The tremendous increase in cost of transportation, of labor, of fuel, of powder, of steel, of barrels, and of all other manufacturing supplies affecting the cost of production is a matter of common knowledge. Scarcity and inefficiency of labor after the best men had gone to war, financial burdens, increase in taxes of every kind, abnormal overhead expenses, and many other things still further contributed to their extraordinary unit cost. Some of these same conditions also increased the relative advantage of the foreign producers in their onslaught upon American markets, for there were as many Chinese laborers in British Columbia during and since the war as there were before it began.

In short, our lime and limestone industry was an absolute victim of the war and enjoyed no offsetting benefits arising therefrom. This occurred after it had been tied hand and foot by the most inequitable tariff law which was ever enacted. Unable to retaliate, unable to raise a hand in defense without still further losses, it was obliged to witness the looting of the depleted remnant of

its previously prosperous home markets, by and entirely in the interest of foreign production and against our own.

War tax.—Since the beginning of the war Canada has levied a war tax of 7½ per cent on all such importations, plus a war tax of 2½ per cent on all freight thereon. This in effect adds just that much additional protection to their producers.

Difference in exchange.—At present the rate of exchange against Canadian money is 15 per cent. At times it has been more than that. This gives a double advantage to their producers and against ours. The proceeds of sales of American lime and limestone in British Columbia, when brought back to our banks, would show a shrinkage of 15 per cent on the gross selling price in Canada.

This represents a still further protection of 15 per cent to their producers in their home markets and against ours.

On the other hand, their sales in American markets are either made in Canadian exchange, which represents a cut to dealers of 15 per cent in price to influence orders in their favor, or when sales are made in American money it is promptly converted into Canadian exchange at a profit of 15 per cent to them on the gross sale price of their goods in our markets. That Canadian exchange is paid to their Chinese labor and adds just that much advantage to their already lower costs, in their still further invasion and slaughter of American markets.

Our import duty of 5 per cent on the manufactured lime only is figured upon its export valuation in British Columbia, which is considerably lower than the present market price at which they sell it here. This export valuation is in Canadian exchange, therefore they lose only 5 per cent in duty on the lower export valuation in Canadian exchange and gain 15 per cent in exchange on the higher gross selling price of their lime. On limestone, which comes in free, they gain the entire 15 per cent in exchange.

Freighting advantages.—A large part of these Canadian importations have reached our markets in British and other foreign bottoms, and they are still being imported in such foreign bottoms. It is well known that such ships operating under foreign laws are able to deliver their cargoes in our coastwise markets from British Columbia quarries and kilns at a much lower cost of freighting than American bottoms, operating under our more liberal American shipping laws, can deliver their American cargoes in the same coastwise markets from American quarries and kilns.

While the United States is making the most extreme effort to build and support an American merchant marine to handle its commerce, its tariff law is thus, without cause or excuse, delivering its home markets for lime and limestone to foreign producers and to foreign shipping, and is even wantonly sacrificing its own industries and its own people in order to accomplish that iniquitious end.

Other inequalities.—Prior to the passage of the two tariff laws above mentioned, no Canadian lime whatever was exported to the markets of our Pacific coast, Hawaii, or Alaska. Their small plants were content to supply the small markets of British Columbia and were not disturbed in doing so. But advantage was soon taken of the opportunity offered by our law. Be it remembered that the first to take advantage was a company now owned by eastern American capitalists operating a Canadian plant through a Canadian corporation, and they are claiming some special consideration and some special right to slaughter American producers with a Canadian weapon because they are Americans. They deserve the greater condemnation. Made absolutely secure by Canadian law in their home markets of British Columbia and hiding behind a literal Chinese wall of protection, they have assaulted their American neighbors across the line by dumping their surplus product in American markets regardless of the injustice to our producers. Still not satisfied and still further to increase their volume of tonnage, to reduce their unit of cost and still regardless of consequence to their American neighbors, and with their purpose of American invasion openly declared, they largely increased their productive capacity, built sawmills and barrel factory at their British Columbia plant, thus providing themselves with cheap fuel and cheap barrels produced by cheap labor. By exporting their lime to the United States in these cheap duty-free barrels they have been injuring both the cooperage industry and the lime industry of the United States.

Through all these advantages their plant has been operated to capacity while American plants have very largely stood idle. Through these advantages

and methods they have increased their American trade until they are now dumping more than three-fifths of their entire output upon the American market. Since the beginning of the war the American consumption has not increased. It has very enormously decreased. Therefore the entire trade which they have managed to appropriate in the United States has been literally and bodily taken by displacing just that much American product in its already war-depleted markets. By running to capacity at the expense of the American producer, they are able to still further reduce their cost of production by spreading their overhead expense over the larger volume.

Other Canadian companies have also forced their way into our American markets. A wealthy company at Victoria, British Columbia, has been exporting large quantities of its lime to Puget Sound and Oregon markets.

Another Canadian company has overrun the northern part of Montana with its product, while a fourth one has been endeavoring to invade the Spokane markets by the quotation of very low prices.

Approximately 60,000 barrels of Canadian lime have been exported to San Francisco during the past year in addition to the large quantity exported to the Northwest, to Hawaii, and to Alaska.

It is evident that a determined effort on the part of Canadian producers is being made to completely overwhelm and absorb our local and Pacific coast markets to the destruction of our home producers by exploiting their advantages in cost under the shelter of a most harmful and inequitable United States law.

They sell only to American dealers. No benefit whatever has accrued to consumers or to the general public. The only beneficiaries are the foreign producers and their American dealers.

If these unfair conditions be permitted to continue, not only will our producers of lime and limestone be driven to commercial ruin, but incalculable injury will be inflicted upon our consumers and ultimately upon the public, as destruction of any domestic industry must necessarily leave the consumers at the mercy of foreign producers.

It is manifest that the American lime and limestone producers are entitled to prompt and adequate relief at the hands of Congress and that under the conditions above recited Congress should exercise its power to justly protect our producers in our home markets as fully as Canada is protecting her producers in their home markets. This can only be done by the enactment of a law fixing such rates of import duty upon lime, limestone, and hydrated lime as will fully equal and overcome all the advantages possessed by foreign producers who now sell or who may seek to sell the same commodities in American markets. Manifestly the Canadian rates would be inadequate. To deny such protection would represent a denial of the commonest principles of justice.

Vital importance of the industry.—As herein indicated, by far the largest and most profitable field of its operations is represented by the arts of peace. There is, however, a more serious aspect which forced itself upon our country's attention during the late war in regard to many factors whose vital importance had theretofore been largely overlooked.

It is absolutely essential in time of war.

While the quantities required for war purposes are comparatively small it should not be forgotten that not a pound of iron or steel can be made without it. No steel ships could be built and no engines installed. No blast furnace nor smelter could operate without it. Not a pound of paper could be made, not a pound of sugar could be made, many of the most important chemicals could not be made, and the whole field of agriculture and horticulture would lose one of its most essential supports.

These are but a few of the lines in which our country might be utterly helpless or desperately embarrassed if forced to depend upon a foreign supply in case of war.

Therefore the vital necessity of fully protecting this industry both in peace and in war.

This does not represent the encouragement and coddling of an infant industry whose value, whose importance, and whose future might problematical, but the salvation of an old industry, important in both peace and war from being further offered up as a free-will sacrifice upon the altar of foreign selfishness and greed.

SEATTLE, *January 3, 1921.*

Hon. LIN H. HADLEY,
Member of Congress, House Office Building, Washington, D. C.

SIR: We desire your help and cooperation in bringing pressure to bear on the Ways and Means Committee to induce it to consider, without delay, the present status of the United States lime industry and its needs. If the committee realized the unfair conditions under which we are now operating, it would surely see that proper protection was provided for all the American lime manufacturers.

As lime manufacturers of the Pacific coast, we are faced with oppressive conditions originating in British Columbia.

The chief trouble comes from the lime works located at Victoria and on Texada Island.

These works are only a short distance from Seattle and other Washington markets.

At the present time 5 per cent ad valorem duty is fixed on imports of British Columbia lime, but this is practically nothing, as it is figured on the factory price in British Columbia, and with the discount on Canadian money is almost negligible.

What we need is a fixed amount per barrel or ton that will give us the same protection that is demanded and received by the Canadian lime manufacturers.

The British Columbia lime should not be brought into the United States.

If we tried to ship lime into British Columbia the customs officials there would at once take steps to stop it through a special order in council, whereby a prohibitive duty charge may be assessed that is effective within 24 hours.

The reason assigned for this power we were informed is that the Canadians need all the earning they can secure to help them get funds with which to pay the Canadian war taxes.

For this reason nothing that will prevent the Canadians from earning money will be allowed.

Limestone, which is the rock from which lime is made, is the most abundant mineral on the earth's surface. It is everywhere present in greater or less quantity. As a consequence, the supply of lime is far in excess of any possible consumptive demand and therefore there is always a lack of market.

This is the condition in British Columbia as well as in the United States, and it is the most natural thing in the world for the British Columbia lime manufacturers to take advantage of the present conditions and sell all that they can of British Columbia lime in the United States, often at lower prices than we can meet.

Surely Congress will recognize that the United States lime manufacturers and limestone producers are entitled to have the United States market guaranteed for their produce and protected from outside interference.

Our company, in common with other manufacturers, has not been able for several years to operate at more than a small part of our capacity. The war prevented shipments to the Hawaiian Islands, our best market, but in the meantime British Columbia manufacturers have been shipping lime in steadily increasing amount into the United States.

We are informed that during the last 12 months 150,000 barrels of lump lime and many thousand tons of lime rock have been shipped into the United States. This has deprived us of just that much output, and we would have been only too glad of the business. All the benefit has gone to a foreign country that will not allow us to ship in our lime.

Our cost of manufacturing is higher than that of the British Columbia people.

The United States regulations bar our using the cheap oriental labor which is employed by the British Columbia manufacturers, who are not restricted.

In the matter of cooperage, British Columbia timber is used with the same cheap labor. We use cooperage made of United States timber.

The selling price of lime represents almost entirely wages paid for labor. The labor situation in the United States demands that every dollar possible be paid to United States wage earners. It is not good sense to pay Canadian labor when we can not give work to our own men.

The market for lime is restricted, and we need all our market just as Canada needs all Canada's market.

As things are now going, we are helping Canada pay her war debts instead of helping the United States pay her war debts.

The duty the United States will collect from imports of lime will not begin to equal the money the American manufacturer will pay for excess profits tax and other charges that are contingent on increasing his business.

With the above remarks we ask that you help out the lime industry by bringing the above statements of fact to the Ways and Means Committee and urging that our cause receive substantial attention.

ORCAS LIME COMPANY,
ARTHUR L. DALLY, *Vice President.*

[Telegram.]

SEATTLE, WASH., *January 8, 1921.*

Hon. LIN. H. HADLEY,
House of Representatives, Washington, D. C.

No better lime is made anywhere than our local Puget Sound brands. No one benefited by importation of any Canadian lime except Canadian producers, Canadian foreign labor, and a few American importing dealers. All other American interests seriously injured. A fully protective duty necessary on lime, limestone, and hydrated lime.

HUBLEY-MASON CO.
BOOKER, KIEHL & WHIFFLE.

W. E. HUMPHREY, REPRESENTING THE LIME MANUFACTURERS OF THE PACIFIC COAST.

Mr. HUMPHREY. Mr. Chairman and gentlemen, I have been more or less familiar with tariff legislation in the United States for many years. When two bills were framed, I thought I knew something about it, as I was a Member of the House, but I have met a surprise this morning. This is the first time in my knowledge that any representative of a foreign corporation, doing business on foreign soil, has ever appeared before an American legislative body to plead for protection of its own interest.

I had always been under the impression that if a man took his capital and went over to a foreign country and did business in a foreign country, that he looked to that country to protect him.

I always thought this tariff discussion was a discussion between the American consumer and the American producer, and, without being harsh, I think it is the most unparalleled piece of impudence that has ever been known in American legislative history that a foreign corporation would send its representative to an American legislative body to urge protection to its interest and to point out why it should not be permitted to destroy American markets and American labor.

And the fact that this corporation is owned by Americans is still more reprehensible. I can not imagine anything worse than a renegade American going over into British Columbia and employing Chinese labor to destroy American markets, to come in here before an American legislative body with a sham plea, and parade his patriotism and ask for assistance. Why don't he go where his business is?

Those gentlemen ought to read the Scriptures, and if they will they will find that it twice occurred in the New Testament "that where your treasure is there your heart is also." Their hearts are over in British Columbia with this cheap Chinese labor. They are not employing Americans with that American capital.

Now, I want to tell you some interesting facts about this company of which you have heard this morning, some very interesting facts

about it. In the first place there are two principal lime companies on the Pacific coast, this company which is mentioned and the Tacoma Roache Harbor Lime Co. on San Juan Island, which, for all practical purposes, is the same situation.

The difficulties that the American manufacturers labor under to-day are three.

First, there is a difference in the exchange which amounts to something like 15 per cent to-day, 16 per cent yesterday.

Next is the difference in foreign tonnage. The Canadian uses boats, foreign boats, in reaching our markets. The American manufacturers are not permitted to do that, as you know, so that the Roache Harbor Lime Co. or any American concern can not do as the Canadians can, ship their product on any cheap tramp steamer manned by a Chinese crew and flying a foreign flag.

The Canadian company can pile their lime upon their wharf and they get these tramp steamers with Chinese crews to carry it to California or Seattle or our other markets. The American company is not permitted to use those ships, as you know.

Now, the greatest handicap is with regard to labor. The British Columbia manufacturer, this very company which is represented here to-day, is appearing before you, uses Chinese labor almost exclusively. I do not know exactly what the difference is what they have to pay now, but before the war I know what the difference in wages were. I can give you that statement. The president of the Roache Harbor Lime Co. visited one of the plants in British Columbia and he was told by a representative of that company along while he was paying $2.25 and $2.50 a day for labor—this manager said that they paid the Chinese 90 cents a day for the very same character of labor. At that time they only had one white man in their factory and that was their bookkeeper.

Now, they have stated in their brief that they find that our manufacturers are using Mexican labor on this side in the Roache Harbor Lime Co.'s works. I received a dispatch on Saturday from Mr. McMillan, and as to the basis for the truth of that I will read it to you:

SEATTLE, WASH., *January 6.*

We employ no Mexicans. Another story manufactured in Canada. In 36 years have employed approximately 50,000 men sent out by Government, city, soldier, and other Seattle public employment agencies representing general labor market supply. Mexicans sent did not exceed six. Practically none here. All nationalities received same wages for same class work. Never employed Chinese or Hindus. Since war begun have required all our employees to either be American citizens or promptly declare intention. Preference given returned soldiers and married Americans.

JOHN F. MCMILLAN.

Now, I have here a report, if I am permitted, I would like to read, made by Mr. Henderson, a representative of the Department of Commerce, and in that report the following facts are set forth by Mr. Henderson. He first sets forth that immediately after the passage of the last tariff law the British Columbia manufacturers started to invade the American markets. He made a special examination of the Roach Harbor Lime Co. and found that the employees were all American citizens. He further found the fact that the Pacific Lime Co. does not sell to the consumer; it sells only to dealers, and that is true to-day.

Mr. GARNER. Mr. Humphrey, may I interrupt you there?

Mr. HUMPHREY. Yes, sir.

Mr. GARNER. What is the cost of lime per 100 pounds?

Mr. HUMPHREY. It varies.

Mr. GARNER. What did they sell their lime for per 100 pounds?

Mr. HUMPHREY. Well, they sold their lime in the city of Seattle, according to reports of this Government agent, at 90 cents a barrel when it was costing them 84 cents to manufacture at the factory without regard to shipping.

Mr. GARNER. What I am trying to get at, you are now talking about laying a tariff upon this lime. Do you know what the tariff was under the Payne-Aldrich Act?

Mr. HUMPHREY. No; I do not remember; I do not know whether it was 5 cents per barrel or 5 per cent ad valorem. There have been a good deal of changes, and I do not remember.

Mr. GARNER. Five cents per barrel or 5 per cent ad valorem would not make a great deal of difference?

Mr. HUMPHREY. I do not know how much the difference is, but I know what is happening.

Now, then, the capacity of the Roache Harbor Lime Co. was 450,000 barrels a year. It is reduced now to about 30,000 barrels a year, and the gentleman representing the Pacific Lime Co. a moment ago told you that they were importing into this country a very small amount. I do not know just how much they are shipping into the United States, but I have received a statement, which I have here, that they sold last year 60,000 barrels in San Francisco alone. That is the report that I have, and that is double what the Roache Harbor Lime Co. produces a year.

Now, the situation out there is just exactly this: That there is no market over on the British Columbia side for the lime. These gentlemen go in there with their great capital and establish a plant in British Columbia, and after building that plant, and after supplying that territory, they began to ship it into the States, and they took just that much away from the American manufacturer.

Now, then, they have told you that they get this market because their lime is better than the American lime. That is all bunk. That is purely for advertising purposes. This report here of this Government agent shows that that is not true, and that it is simply an advertising proposition. Now, then, I want to give you a few extracts from this report. It states that back in 1913, after this present law was passed, this foreign company commenced a war on the American manufacturers in this country. And the American manufacturer, as far as this report [referring to it]—I think the chairman has a copy of the report—they commenced war on the American manufacturer, and they sent representatives to the American manufacturers and told them that if they would pay a certain percentage they would not interfere with the market, but they demanded a certain percentage given to them as a tribute for not selling in the American markets. When the American manufacturers refused to do that they sent to Jahn & Co., of Seattle, a large amount of lime at 90 cents a barrel. The gentleman here a while ago evidently did not know that fact. Mr. Jahn accepted that lime at that price, but, to use the street expression, I suppose he "double crossed"

them, because while he bought the lime for 90 cents per barrel he said he was at liberty to sell at the American market price, and he did so, and the corporation took great umbrage at that and refused to sell any more to this company. Then this foreign company sold out to American capitalists and then again commenced to destroy American markets.

Mr. GREEN. About how much was the American price at that time?

Mr. HUMPHREY. I beg your pardon.

Mr. GREEN. About how much was the American price at that time you say they sold the market.

Mr. HUMPHREY. My recollection is that it was something like $1.25 or $1.50, somewhere along that figure.

Now, the gentlemen who have appeared here this morning are anxious to get into the American markets, and they are making great efforts to do so. I have some of their advertisements here, some that were received this morning. They are advertising and doing everything to get into the American market, but there is one great thing about it, that they never say anything in any of those advertisements which will indicate that their goods are foreign manufactured. They are careful concerning that fact, and while they parade here before you as manufacturing the purest lime in the world, they are very anxious for the people out in Washington to not know that it is foreign manufactured. Now, I appeared here some time ago, you remember, in regard to this lime question, when you had the special bill under consideration. I appeared here, as I recall, on July 19, 1919. They took very great umbrage at that fact, that American producers should have the audacity to come down and ask for protection against this foreign company and they resented it.

They had formed an association out in the Northwest of the lime companies for war purposes under the direction of the Government and with Government approval, and this particular company by some means which nobody has ever yet been able to ascertain or to find out the reason for was the only foreign company during the war permitted to bring lime into this country, but they got that privilege some way, and after they started sending lime into this country and had come into this association, for war purposes, inasmuch as Canada was our ally, and they were asked to come in and cooperate with the American producers for war purposes in order to protect the two countries. They failed to attend the meeting after I appeared down here. I do not remember saying harsh things about the company, except that they were a foreign corporation, and that we had reached a place where it was no longer necessary that they should send in lime.

Mr. TILSON. You did not say anything any worse than you have said this morning?

Mr. HUMPHREY. No; I did not say the things that I have said here this morning, because I did not feel that I was at liberty to say anything about them before. And so, when this patriotic company comes down here asking the American Congress to protect them so that they may use cheap Chinese labor and take away American markets for American products, and take work away from American workingmen, I feel I am justified in telling the truth

about them. I will read the letter this foreign company wrote. It is directed to the Northwest Lime Association, Seattle, Wash.:

SEATTLE, WASH., *July 25, 1919.*

GENTLEMEN: We are in receipt of your secretary's letter of the 23d instant, admonishing us for nonattendance at the regular July meeting of the Northwest Lime Association, and in reply we beg to say that we were busy on that date repairing some fences that had suffered some damage by insidious attacks against us as lime distributors in this territory on the grounds of our material being of foreign manufacture.

We had entertained the idea that when the United States Government advised us that to put us on an equal footing with American lime manufacturers, they would put a duty tax upon us of 5 per cent of the value of our product, based on its price at our plant to our principal Canadian market (Vancouver), we would be on an equality with the American manufacturers, which we believe was the full intent of the United States Government. Now, however, our associates in the Northwest Lime Association, or at least one of them, is persisting in trying to injure our trade in the State of Washington, not by any exhibition of salesmanship, but by advocating that the United States Government was remiss in its duty to American manufacturers in allowing so small a tax to be levied against us, and asks by its procedure that the dealers in and users of lime reprimand their Government by refusing to handle or use our material.

The Pacific Lime Co. (Ltd.) has such confidence in the ability and integrity of your Government that we are willing to abide by its decision whenever such has been made a regular governmental order.

We wish to emphatically state that as we have followed both the spirit and the letter of the law in regards to marketing our lime in this field, we will oppose by every method in our power the unfair tactics of any competitor who endeavors in any way to introduce an argument against our having an equal right with him in this territory.

We pay the full duty tax demanded by the United States Government and are entitled to equal protection by that Government, as well as fair treatment from our local manufacturing competitors. If we can not get fair treatment from local lime manufacturers, there is no advantage to us in our being associated with them in the Northwest Lime Association.

PACIFIC LIME CO. (LTD.),
By W. S. KEITH.

You will note that they did not care anything about the helping our country. They had suffered damage by "insidious attacks" against them.

One of their complaints was an advertisement which I have here that was sent out by the Prosperity Club, Pine Street, Providence, R. I., and the Roache Harbor Lime Co. had the audacity to use that card, which said. "America first." They have been distributed all over the United States. And, the Roache Harbor Co. distributed those cards, and this Canadian lime company took great umbrage at it and resented the fact that the American company should send out advertisements suggesting that Americans should patronize American firms.

Mr. HADLEY. What is that?

Mr. HUMPHREY. There is a quotation on there from the Texas governor. That is one of them.

But, those advertisements gave great offense to the patriotic men who are appearing here for this British Columbia company, and these Americans who have put their capital over there, and who say that this is the only source of supply for pure lime, and put their factory in a foreign country in order to obtain cheap Chinese labor.

There is an unlimited supply of limestone and of material for the manufacture of lime for a thousand miles along the Canadian border.

Mr. GARNER. The Canadian Government is now taking steps to exclude the Chinese immigrant, is it not?

Mr. HUMPHREY. Not to my knowledge. They have always had a very large head tax.

And, I want to call to the attention of this committee this other fact, too, that during the war while America's young men, were over fighting the battles of this Nation, that this patriotic company over there in British Columbia were employing this Chinese labor, and this company was employing this Chinese labor just as much in British Columbia during the war as they were before, and during that time, they were making every effort, and taking advantage of that situation to invade the American market. I do not hesitate to say that it is the most infamous illustration that has ever come to my knowledge of a foreign manufacturer invading American markets.

Mr. HADLEY. I want to ask you if you have any knowledge with regard to the lime industry on the Pacific coast and if there is anything that will connect it up with the operation of this company?

Mr. HUMPHREY. I just want to call the attention of the committee to this fact that last year they sent 60,000 barrels of lime into the San Francisco market alone and that the entire production of the Roache Harbor Lime Co's. output is only about half of that.

I want to call your attention to a few other things in this letter. You note that they state:

We had entertained the idea that when the United States Government advised us to put us on an equal footing with American lime manufacturers they would put a duty tax of 5 per cent of the value of our product based on its price at our plant to our principal Canadian market (Vancouver) we would be on an equality with the American manufacturers, which, we believe, was the full intent of the United States Government. Now, however, our associates in the Northwest Lime Association, or at least one of them, is persisting in trying to injure our trade in the State of Washington, not by any exhibition of salesmanship, but by advocating that the United States Government was remiss in its duty to American manufacturers in allowing so small a tax to be levied against us and asks by its procedure that the dealers in and users of lime reprimand their Government by refusing to handle or use our material.

They are complaining there because I appeared before this committee and asked for a larger tax, and asked that we protect American manufacturers. They further state:

We wish to emphatically state that as we have followed both the spirit and the letter of the law in regards to marketing our line in this field we will oppose by every method in our power the outside tactics of any competitor who endeavors in any way to introduce an argument against our having an equal right with him in this territory.

Can you imagine anything that beats that for impudence?

And they state that they have every confidence in this Government. And they further state that they have followed the letter and the spirit of this law. That is hardly consistent with the official record, as the record shows that this company has been twice heavily fined for violating the revenue law that they state they have followed to the letter and in the spirit.

We pay the full duty tax demanded by the United States Government and are entitled to equal protection by that Government as well as fair treatment from our local manufacturing competitors. If we can not get fair treatment from local lime manufacturers, there is no advantage to us in our being associated with them in the Northwest Lime Association.

Think of that, demanding equal protection from this Government as well as fair treatment from their local Government; and if they can not get that, there is no advantage of them being associated with the Northwest lime producers in the Northwest Lime Association.

Now, that is the excuse they gave for refusing to be associated with the Northwest lime producers in time of war, when the two nations were at war together.

Mr. HADLEY. What rate are you asking for?

Mr. HUMPHREYS. Well, we ought to have at least a dollar a barrel, because there is 15 per cent difference in the rate of exchange, 15 cents on United States ships, 15 cents difference in their rates, and then you ought to put in an antidumping clause.

Another thing I just wanted to say is this, and that is that if they can not get what they want, just exactly what they want, they will go over on the other side and secure it. Imagine any American living anywhere else and refusing to be an American manufacturer, and going over into British Columbia where they are absolutely protected over there and manufacturing any substance, by using Chinese labor and American capital, and then coming in here trying to take business away from American business men.

Mr. HADLEY. When you say that you want a dollar a barrel, you mean that you want a dollar a barrel if the exchange is not otherwise taken care of?

Mr. HUMPHREY. No.

REPLY OF ALFRED W. GRAY, OF THE PACIFIC LIME CO., TO STATEMENT OF W. E. HUMPHREY.

Mr. RAINEY. You are an American citizen, Mr. Gray?

Mr. GRAY. Am I?

Mr. RAINEY. Your offense is that you have invested capital in another country?

Mr. GRAY. That is the offense. I am one of the offenders. I am one of the stockholders in this company, this Niagara Falls Co., where this company is doing business.

Mr. RAINEY. All right.

Mr. GRAY. I think there is very little that I wish to say additional. I did not wish to get into anything like this. I asked for an opportunity to reply. I wish to say this, however, that I do justify the Pacific Lime Co., then when we were allies and they made an attack upon them, which they considered an invidious attack upon them. They made it upon the wrong state of facts, but they thought they were right, and we did not wish to attempt to cooperate with them when there was a hostile spirit in that association against them.

We have done nothing to stir up any feeling or to get anybody to come out and make it so cold for us.

We have just come here with a simple statement of facts, with the idea that this revision of the tariff was to be done on a scientific line, and do not care for the hurrah boys, and did not consider that that would get us any further.

Now, the distinguished gentleman has shown our Chinese employees—our Chinese labor—as being cheap labor. We pay our Chinese labor $4 a day. We have more white men at all times since the years that I have been in contact with the people, the year 1917; before that I do not know, but since the year 1917 the greater part of our labor has been white labor—British subjects, Canadian subjects, and some Americans come over there to work. We have employed Chinese labor, but we pay that Chinese labor $4 per day at the present time for ordinary labor. And just prior to this recent slump we were paying $4.50 a day for that labor.

Mr. YOUNG. Are there any Hindus employed?

Mr. GRAY. There may be Hindus in that neighborhood, but we have never had any Hindu labor in our employ.

Mr. HADLEY. What kind of labor do you employ for cooperage?

Mr. GRAY. We have two or three coopers. They are, I think, Chinese for the most part. We have about eight coopers.

So that, so far as this labor, this difference in cost of labor between Canada and the United States it is nil.

The crew on our ship is not composed of Chinese; they are all white. We have our own boat and carry our own product, and it is managed by a white crew.

So the gentleman is in error in that respect.

Now, with reference to the selling rate at any time below the market price in the United States, I have simply to refer to substantiate my statement that we never did. I simply refer to the remarks of the distinguished gentleman when he appeared here before the committee in July, 1919, where he says that we were dumping lime; these are practically his words—dumping lime into the United States—but, strange to say, it is not to the benefit of the user, because they do not sell below the market.

Now, of course, under those circumstances I feel that he has already vindicated my statement regardless of anything I may have said this morning. With reference to the number of barrels sold in San Francisco this year I do not know whether that is correct or not. I simply know that in previous years we have never sold to exceed 50,000 barrels in the United States; whether this year we brought in 60,000 barrels or not, I do not know, so I will not contradict that. We may have done so, but 60,000 barrels as against 990,000 barrels manufactured in the State is not very important and could not break any line of business and the same would hold true with regard to the State of Washington.

Now, in connection with the past, I am filing this affidavit showing that we have done nothing to interfere with the prosperity of the Tacoma & Roche Harbor Lime Co. That company met its Waterloo many years ago.

Mr. HADLEY. What about the Orcas? They are doing business in my district.

Mr. GRAY. The Orcas Lime Co. is really taking trade away from the other local companies and taking away some of our trade. They have branched out and that is the only one I am familiar with.

Mr. RAINEY. What do you have reference to when you say that they met their Waterloo?

Mr. GRAY. That was a fight between the Henry Cowan Lime Co. and a California concern, which was very healthy and the biggest

on the Pacific coast, and that grew out of animosity between Mr. McMillin and Henry Cowan.

Mr. RAINEY. What kind of a war?

Mr. GRAY. It was a price-setting war to such an extent that they cut down from 15 kilns to 2, and from 330,000 barrels a year to 30,000.

Mr. HADLEY. They had 14 for a long time before the war in operation. That controversy did not destroy the business.

Mr. GRAY. In 1916, I believe they were manufacturing a maximum of 200,000 barrels. All I know is what was stated in an affidavit by an agent of Mr. McMillin.

Mr. HADLEY. I want to call to your attention the fact that they were not destroyed by that controversy which took place many years ago, because they were a going concern for a long time after that, as I understand it.

Mr. GRAY. However that may be, this correspondence as to the facts shows that the business was destroyed by the trade warfare. In any event, our small amount of lime coming into the State of Washington in no year exceeding 3,000 tons, could possibly put out of business a company which was manufacturing 300,000 barrels, or 30,000 barrels. It could not have put them out of business, of course, and cut them down from 5 kilns—I think they only have 3 kilns, when they were operating 13 kilns our small importations could not have put them out of business.

Mr. HADLEY. Of course the Hawaiian market was not eliminated.

Mr. GRAY. Yes; our business was destroyed in the Hawaiian market.

Mr. HADLEY. Not until after the war.

Mr. GRAY. We sold nothing in 1917 and 1918 and 500 barrels this year.

Mr. OLDFIELD. You mean by that trade war, that they were cutting the prices back and forth, and that that put those corporations out of business?

Mr. GRAY. Yes, sir; that is what was done. But we could not get ships to Hawaii during the war, so they started a plant of their own, and they have taken pretty nearly all of the business except what one company retained.

REJOINDER OF W. E. HUMPHREY, REPRESENTING LIME MANUFACTURERS OF THE PACIFIC COAST, TO ALFRED W. GRAY.

Mr. HUMPHREY. I am reading now from a report by Mr. Henderson. He says:

Mr. Jahn, of W. F. Jahn & Co., admitted that he had last year a contract with the Pacific Lime Co. for lime at 90 cents per barrel. He disclaimed, however, that he was to sell it below the market price of American lime, but admitted both the fact that 90 cents per barrel lime is very little above the actual cost of production to say nothing of the freight, and also that he sold this lime at, or but little if any, below the market price.

And then, I desire to call the committee's attention to another part of the report where he makes the statement, he has this to say about the Tacoma & Roche Harbor Lime Co.:

Especially is this true in the Tacoma & Roche Harbor Lime Co. There a little community has been built up by this lime industry. It is situated on an island, and in a sense cut off from the rest of the world. There are no other

industries near by, except those operated in conjunction with the lime company. Most of these employees own their own homes. It will be understood that when part of these kilns are closed down that some of the workmen had to leave; but the management informed me that the irregulars and those without families went first. The representations on this subject by the manager, who has been in charge some 30 years, were corroborated by several of his men who have been with him from the first. So much for the manner in which it would affect the Tacoma & Roche Harbor Lime Co., which, as has been stated heretofore, constitutes about two-thirds of the lime industry of this section, and all of whose employees are American citizens.

Then this report further says:

Contractors and builders, who are real consumers—of the large number of these I interviewed not one claimed any advantage accruing from the reduction in prices of lime as the result of Canadian competition.

Then the report further says:

The little dealer or ultimate consumer has not in the least benefited by any reduction in the cost of lime.

Mr. HADLEY. Who is Mr. Henderson?

Mr. HUMPHREY. He was an agent of the Department of Commerce that was sent out to make that investigation.

Mr. HADLEY. Is he at present an agent?

Mr. HUMPHREY. No; he recently resigned.

Mr. HADLEY. You are reading from a report he made?

Mr. HUMPHREY. Yes; I am reading from a report he made while in office, and he made it some time ago; 1913, I think.

I am reading this to show you gentlemen, so that you may understand that the consumers of lime in the State of Washington do not get any advantage.

There is no use of arguing that question to this committee, because they know of thousands of instances where when the tariff was reduced the price went up; that was true with regard to coal, and it is true with regard to this product.

Mr. HADLEY. Will your brief give the statistics as to the cost?

Mr. HUMPHREY. I can give some of that.

Mr. HADLEY. Your brief will handle that subject, I assume?

Mr. HUMPHREY. Regarding the affidavit: I do not know who the gentleman is that has signed it, but, the destroying of the Roche Harbor Lime Co., their production immediately before the war was 300,000 barrels, and after this war, they could not well be destroyed, but something had happened before.

I have another thing to say with regard to the use of the product, or the shipping of the product to the American market, and to San Francisco, and I have here a letter that was submitted to Congressman Hadley which seems to me to be a little contradictory to the statements made by the gentleman.

Now, as a matter of fact, in that matter that statement, I stated exactly what occurred. They used foreign ships to carry these goods. I did not say that they had Chinese crews or that they were manned by Chinese, but they used British vessels, and Norwegian vessels were used in bringing this product down to San Francisco and I repeat again that this whole business was carried on there on account of the cheap labor. I have right here in my hand——

Mr. RAINEY (interposing). How much do you pay your labor? Does your company pay your labor more than $4.50 a day?

Mr. HUMPHREY. They pay twice as much as the Canadian company pays their Chinese. If they pay $4—well, I do not know whether that is true or not, but I know that they are not paying the Chinese more than half as much as the American company has to pay white men.

Mr. RAINEY. I am asking you what you pay your employees.

Mr. HUMPHREY. We paid $2.25 and $2.50 a day before the war. They are probably paying three times that much now. They were paying $2.25 and $2.50 during the period when the Canadian company was only paying 90 cents per day, and I presume the same proportion still holds good.

Mr. RAINEY. Then, you mean to say that if they are paying the Chinese $4 a day you are paying your labor twice that, or $8 a day? If that it true, then it benefits the white labor, if your company simply doubles the price.

Mr. HUMPHREY. No; the Canadian company simply employs Chinese labor at half price.

Mr. RAINEY. Do you mean to say that you are paying your common labor $8 a day?

Mr. HUMPHREY. Why, we have paid $8 a day. We paid some $16 during the war.

Mr. RAINEY. I mean now.

Mr. HUMPHREY. I do not know what they are paying now.

The CHAIRMAN. I will say, gentlemen, in the lumber camps I am operating in the State of Washington our average wages to-day are $7.75 a day.

Mr. RAINEY. And you pay double what they are paying the Chinese. Now taking the exchange——

Mr. HUMPHREY (interposing). With regard to that, I have right here a letter from the Department of Labor, United States employment office, Seattle, Wash., January 1, 1921, and I just want to call your attention to the first part of it. It says:

> Seven thousand men and women, fellow citizens of ours, are out of work at this time in Seattle. We may not owe them a living, but we do owe them a chance to make one by providing the work; they are ready, anxious, and competent to do. Hungry men can't wait. Let us do it now.

Yet you have that situation. Will you permit them to take away employment from these Americans?

BRIEF OF ALFRED W. GRAY FOR THE PACIFIC LIME CO. (LTD.).

In the hearings upon this subject before the Ways and Means Committee on January 10, 1921, and in the statements filed appear certain errors or misconceptions of the facts, the chief of which this brief will seek to correct.

Upon this hearing Mr. Gray stated that the American interests, he believed, purchased this company in 1913. He finds upon investigation that it was in November, 1916. The representative of the Tacoma & Roche Harbor Lime Co. seriously criticized this company for appearing before this committee and presenting its views. We will not answer this criticism, as the committee itself has answered same by giving us a hearing. Relative to the various charges made by the representative of the Tacoma Co. against this company, viz, that we employed all Chinese labor, excepting one white bookkeeper; that we had been fined on two occasions for violating the revenue laws; that we sold lime at 90 cents a barrel when it cost us 84 cents to manufacture it; that we paid our Chinese labor 90 cents per day as against $2 and $2.25 paid in the United States for white labor; that we threatened a trade war in the sale of lime unless tribute was paid by American purchasers—are all statements which if true were true only at a time prior to November, 1916, when the company was

reorganized and was purchased by American interests, as none of these statements are true or have any foundation in fact since that time.

In fact, at the present time we employ as great a ratio of Anglo-Saxons as the average lime plant on the Pacific coast, particularly in California, where a great deal of Mexican and Indian labor is employed, as well as Italian and Austrian, and the rate of wages paid to our employees will average as high as the wages paid in the United States for the performance of the same class of work. In the lumber camps in British Columbia $7 and $7.50 was paid for the ordinary labor, but the class of labor employed in the manufacture of lime is of a lower order on an average in the United States as well as in Canada than the class of labor employed in the lumber camps, and their compensation is correspondingly lower.

During the hearing inquiry was made as to whether or not the Canadian Government had recently taken action to exclude Chinese immigrants. We are now able to answer that inquiry and advise the committee that such action was taken by the Canadian Government about a year ago.

The representative of the Tacoma Co. stated before the commission that while American young men were fighting the battles of this nation "this patriotic company over there in British Columbia were employing these Chinese labor, etc." He apparently failed to recollect that for two years and a half prior to America's entering the war Canada had been sending her young men to fight in this same cause, and that British Columbia was practically denuded of its able-bodied white men, and the remark of counsel seems hardly fair under these circumstances, and particularly since this parent company has received a special certificate thanking it for its patriotic services during the war in furnishing munitions and rendering such aid as lay in its power.

Upon this hearing the representative of the National Lime Association presented certain oral and written statements which we wish to answer briefly. He complains with apparent bitterness of the Canadians coming into this country and selling their lime and competing with American producers, and yet according to the tables which he himself produces for the consideration of the committee the imports of lime from Canada the last five years have been very much less than the exports during the same period. The imports from 1915 to 1919, inclusive, were approximately 30,000 tons (see p. 334), while the exports during the same years were about 80,000 tons, while the Summary of Tariff Information, pages 137 and 138, states that approximately five times as much lime is exported to Canada from the United States as is imported from Canada to the United States.

In view of these facts it is hard to comprehend how the argument of the representative of the National Lime Association can be sincere. In view of these facts it can not be possible that the manufacturing of lime is materially, if at all, cheaper in Canada than in the United States, and the insincerity of the argument advanced and the statements made regarding the duty that should be placed upon lime, as set forth on page 337 of the hearing, can be no better illustrated than by the small item of 5 cents a hundred pounds difference in shipping cost. The argument is made with reference to the Northwest and based upon the business in the Northwest and the claim is made that 5 cents a hundred pounds should be added to the duty because it costs 5 cents more for the American to ship his lime to the American market than for the Canadian to ship to the American market, this in view of the fact that the Canadian brings his lime to two points in the West, one Seattle, the other San Francisco, and in each instance brings it practically to the point of manufacture of the American producer.

In other words, he brings it 230 miles to reach the point where the Seattle producer manufactures and 900 miles to the point where the California producer manufactures. He would therefore be at a disadvantage on all his expense in shipping to that point, and from there on would have the same expense as the American producer, and it is this heavy freight charge which he has to bear which makes it almost impossible to compete at all in the American market, and has never made any appreciable profit in so doing until the rate of exchange favored such importations. In other words, there is practically no difference in cost of production between the United States and Canada. The heavy freight rate for shipment of inflammable material such as lime makes it impossible to compete with the American producer except under most favorable circumstances, and this company, at least since 1916, has never attempted to dump any lime into the United States, and never will, because it can not afford to, and the rate of exchange between the two countries fluctuates so from month to month that it would be impossible to place a duty having that in mind and make it a workable proposition. Furthermore, if the United States is going to shut out Canadian goods, the Canadians, in self-defense, will have to shut out American goods, and this is the last thing that the interests of this country demand. Except for the difference

in exchange at the present time Pacific Lime Co. could make no appreciable profit on the manufacture of lime for sale in the United States, and the sale of lime, as of other commodities of Canadain manufacture in United States, will correct the exchange condition, and then the reduction of the exchange will automatically produce a reduction in the amount of importation, so that if the tariff is left as it is the best results will be obtained.

The representative of the National Lime Association urges that the Canadian uses cheaper fuel than the American, and that therefore the American interests should be protected so that they could burn the more expensive fuel. In other words, so that they can burn oil, which is now used for the most part in California and some of the other States.

It is our impression that from the American standpoint we should conserve our oil deposits, rather than to so frame our legislation that we will further destroy them.

In conclusion, to summarize the salient facts presented in our argument, it would seem that the request of this company that the duty should not be raised, is warranted by the following facts:

1. That this company is owned entirely by Americans, and that the same was purchased and developed solely for the purpose of advancing an American corporation in the building up of an industry in the western part of the United States which shall consume its product.

2. That this parent company buys more lime from American producers than it imports into the country.

3. That the total imports of lime into this country, according to the Government's records, is less than one-fifth of 1 per cent of the domestic consumption, and that approximately five times that much is exported.

4. That the amount of lime imported, even in the Western States where most of it comes in, is so small that it would have no appreciable effect upon the business of numerous lime producers in those States.

5. That this company, since its reorganization in 1916, has never endeavored to break the price of lime or to sell below others. It's dealings have always been fair and aboveboard.

6. That its product is 99.6 pure and is the best to be found on the continent and is, for that reason, a great boon to orchardists as well as other consumers.

7. That this company does not employ cheaper labor than others in the United States engaged in the same line of business, and is under heavy transportation expenses and can not afford to bring this product into the market if any appreciable increase should be made in the import duties.

We therefore request that no substantial change be made in the tax upon the importation of lime.

Brief of the Lime Manufacturers of the Pacific Coast.

I am filing herewith a brief showing the necessity for a protective tariff upon the lime industry of the Pacific coast. The details of the situation have been fully and accurately given in briefs and arguments heretofore presented to the committee and are fully and comprehensively covered in a letter filed herewith, written by John S. McMillin to George B. Wood, president of the National Lime Association. So the one purpose of this brief is to briefly recapitulate the facts, with the hope that it may be of some service to the committee.

NECESSITY OF PROTECTION.

The life of the lime industry in the Pacific Northwest depends absolutely upon protection being afforded from the destructive competition of the Chinese-produced lime of British Columbia.

Location of United States and British Columbia plants.—The largest American lime company of the Pacific Northwest is on San Juan Island, in the State of Washington. The largest competing company in British Columbia is near Vancouver. The American and British Columbia companies are on practically equal terms so far as distance from American markets is concerned.

ADVANTAGES OF THE FOREIGN MANUFACTURER.

The British Columbia companies have three distinct advantages over the United States companies in controlling American markets: First, the foreign company can and does use foreign cheap ships, with their cheap crews, to carry their Chinese-

produced lime to American markets. The American companies can not do this. Here the foreign company has an advantage of approximately 15 per cent of the value of the product.

Second, the American company is to-day handicapped by the difference in exchange between the United States and Canada. At present this disadvantage is approximately 15 per cent.

Third, and greatest of all, the Canadian company employs almost exclusively Chinese labor in manufacturing lime. The wages paid the Chinese laborer are not more than one-half the amount paid by the American manufacturer to the American laborer for identically the same work.

The present tariff.—The present tariff is 5 per cent on lime. Limestone is free.

Tariff to equalize conditions.—To place the American producer on equality with his Canadian competitors the following tariff would be necessary:

Lime in cooperage, 50 cents per hundred pounds, gross weight.
Lime in bulk, 30 cents per hundred pounds.
Hydrated lime, 40 cents per hundred pounds, gross weight.
Limestone, broken or crushed, in bulk, 15 cents per hundred pounds.
Ground limestone in bags, 7½ cents per hundred pounds.
Ground limestone in bulk, 5 cents per hundred pounds.

Canadian tariff.—Import duty into British Columbia on lime from the United States, 17½ per cent.

On the value of the package containing same, 17½ per cent.
On limestone, 15 to 30 per cent.

DIFFERENCE IN WAGES IN CANADA AND THE UNITED STATES.

It is almost impossible to get the exact wages paid by the British Columbia manufacturer. They conceal the facts as much as they can and do not always tell the truth about it. However, it can safely be said that the wages paid to the Chinese employed in the British Columbia industry in no case exceeds one-half of what is paid American labor for the same work, but in many instances the amount paid to the Chinese laborer is not more than one-third of the amount paid to his American competitor.

The Chinese do most of the work in producing lime in British Columbia and in so far as they are employed, the labor cost of a barrel of lime in British Columbia is not more than 40 to 50 per cent of the cost of producing a barrel in the United States.

Here is a comparison of wages that is approximately correct that are paid at the present time by the American and Canadian manufacturer:

Wages paid.

	British Columbia.		United States.	
	Nationality.	Wage.	Nationality.	Wages.
Coopers	Chinese	[1] $4.00	American	[2] $8.00-$10.00
Firemen and boiler stokers	do	[3] 3.85	do	[3] 7.00- 9.00
Common workers, in mines	do	[3] 2.62	do	[3] 5.00- 7.00
Common workers	do	[4] .25	do	[4] .50- .75

[1] 10 hours. [2] 8 hours. [3] Per day. [4] Per hour.

The above comparison does not take into consideration the present difference in exchange.

Of course, it would be idle to argue that Chinese labor is not cheaper than white labor, although the Canadian competitor has the amazing assurance to attempt to do this. If Chinese labor is not cheaper than white labor, why is it employed? These patriotic (?) Americans that invest their capital in foreign countries and pay taxes to foreign nations to take work and wages from American workmen and markets and from American manufacturers, would have the American public believe that they employ Chinese labor solely for philanthropic and patriotic reasons.

FOREIGN COMPANIES.

The main foreign company in the Pacific Northwest, and in fact on the Pacific coast, is the Pacific Lime Co., situated at Blubbers Bay, British Columbia. This company is a commercial pirate. It located in British Columbia, not for the purpose

of supplying British Columbia markets, but for the express purpose of capturing the American markets on the Pacific coast and destroying the lime manufacturers of this country.

This company has practiced every method known to commercial piracy to accomplish this result. It has been guilty of "dumping" in the most reprehensible manner. It also attempted to compel the American companies to pay tribute to it to keep out of American markets. It has evaded payment of duties in bringing its product into American markets and for such evasion, has been twice or oftener heavily fined. It uses misleading and false advertisement. It became violently indignant because the American companies had the assurance to ask Congress for a higher tariff duty. It especially resents the patriotic advertisements of American companies, asking that the American product be given preference. This company arrogantly demands the same rights in American markets as the American manufacturer.

This foreign company, with its investments in a foreign land, employing cheap Chinese labor to capture American markets, that has practiced the iniquities above enumerated, had the unparalleled impudence to appear before the American Congress and insist that its interests be given protection and consideration. This amazing conduct of this foreign company is something new in American legislative history.

The claim of the Pacific Lime Co. that it is an American-owned company is only that much more to its discredit. We expect a foreigner in his own land to be loyal to his country and attempt to invade and capture foreign markets if he can, but how can anyone have anything but contempt for Americans that go into Canada for one reason only, because they can employ cheap Chinese labor. This company, instead of boasting of such reprehensible conduct and parading it before the public, ought to be ashamed of it, and it would be at least something to its credit if it attempted to conceal its actions.

SMALL AMOUNT IMPORTED.

It is strenuously urged by the foreigner and his sympathizers that the amount of importation of lime is small. This is true, but the amount of injury is not small. The great majority of lime manufactured in the United States is protected by distance from competition, but at the border this competition is fatal. It is argued that only $6,000 in duty was collected last year, therefore that little injury had been done. It must be admitted that little benefit was received by this Government. But look at the other side of the picture: One-half of this duty—$3,000—was probably collected on lime brought into American markets on the Pacific coast. What did the Government give to secure this $3,000 in duty? She gave away the work and wages of at least 500 American citizens. She took at least $50,000 in wages from American workmen and gave the sum to the Chinese working in British Columbia, and all for the pitiful sum of $3,000. Will any American claim that it is worth the price?

We do not know how much Canadian lime came into this country last year. It seems impossible to get official statistics upon this point. But we do know that 60,000 barrels of Chinese-made lime went into San Francisco alone last year. We do know that every pound of this lime would have been made in America by American labor if we had protected our industry as Canada protects hers. We do know that no consumer in America was in any way benefited by the bringing in of this foreign lime and all we got for letting this work and wages go to the foreigner was the pitiful sum of $3,000. The amount of damage done, as a whole, to American industry by the importation of lime may not be very great, but the benefit received by the Government for permitting its importation is infinitely small.

PROTECTION DEMANDS.

The American Government should certainly treat our citizens as well as Canada treats hers. Certainly the time has come when the United States will no longer permit Canada to place burdens upon Americans seeking her markets that we do not place Canadians seeking ours. All we ask, and this we think we not only have the right to ask but to demand, is that the American lime producer shall have at least an equal opportunity with the Canadian producer to sell in American markets. Anything less than this is treason to American interests.

Finally, we do not permit Chinese to come into this country to perform labor. Why should we permit the result of their labor, produced in Canada, to come into this Nation to compete with the products of American labor?

TACOMA & ROCHE HARBOR LIME CO.,
Seattle, Wash., January 27, 1921.

DEAR MR. WOOD: I have not been sending you any communications to your home address for several days, knowing that you would be in Washington, and that you would there be in touch with the general offices of the association and also with our attorney, Mr. Humphrey, and that you would be put in possession by them of all the more recent communications which I was rushing forward in anticipation of the hearing on January 10. Since the hearing I have been sending still further communications, and I will inclose copies of a number of them in this letter, which I trust will bring the subject up to date, even though it represents some repetition of the subject matter; but I will be able to give you in that way the details from our standpoint more quickly and perhaps more satisfactorily than if I attempted to cover all the details afresh to you. A list of the inclosures will be found at the end of this letter.

I am just in receipt of an advance rough copy of the report of the hearing before the Ways and Means Committee held on January 10. Naturally I have been greatly interested in the whole report. I wish to thank you and to congratulate you upon the splendid presentation of the subject you made as shown by this advance copy of the report. It is both clear and instructive. Much of the information, and particularly the statistical information, I was very anxious to have when I wrote my statement to Congressman Hadley which appears in the record; and in the report sent to me, and of which you have a copy. I am very much pleased that you were able to and did furnish to the committee the definite statistics which I was unable to obtain here. Strange as it may seem, I have been unable up to this time to get a statement from our collector of customs here showing the importations of lime, limestone, and hydrated lime from Canada through this port. He claims that he has not the information and can not get it. To-day I have a letter from him stating that he is in receipt of a letter from the Bureau of Domestic and Foreign Commerce at Washington stating that they have not the information and can not furnish it, although we promptly secured the same information as to imports through the port of San Francisco direct from the collector there.

SCHEDULE OF RATES OF DUTY.

I have been particularly interested in the brief which you submitted. In making up your schedule of duties proposed, however, I observed one omission which is a very important one to us. I do not know why it was omitted and can only attribute it to oversight in the very hasty effort which was necessary to get this data in proper shape. The same omission appears in the weekly letter No. 65, received to-day from the National Lime Association. As the omitted item is of such very great importance out here and not having had time to receive any explanation as to why limestone, broken or crushed, was omitted, I therefore wired Mr. Humphrey by night letter as follows:

"Wood's schedule tariff rates should read: Lime in cooperage, fifty cents hundred gross weight. Bulk, thirty. Hydrated, forty. Limestone, broken or crushed, fifteen. Ground in bags, seven and half. Bulk, five. Please furnish this schedule to our Senators. If all approve, request amendment emergency tariff. Please mail dozen copies report of lime hearing. Wait letters before filing brief."

Taking up the schedule and by number:

(1) "On quicklime in cooperage a duty of 50 cents per 100 pounds."

I fully agree excepting that I would like to see two words added thereto, namely, "gross weight," which would make it read: "On quicklime in cooperage a duty of 50 cents per 100 pounds, gross weight." This amendment would avoid all confusion in figuring duties and would afford that much more protection to our friends in the cooperage business who are helping us in every possible way to win this fight for protection on lime.

I was very glad to note your change of the language which I had suggested of "$1 per barrel." I had overlooked entirely the fact that lime manufacturers used also the large-sized barrel on the Atlantic coast. It is never used out here. Fifty cents per 100 pounds, gross weight, however, will protect all of us on whatever sized package and in whatever kind or weight of package lime might be imported. Therefore I heartily approve of the language used in your proposal No. 1, excepting that I would like to see the words "gross weight" added thereto, and I trust you will agree with us as to that amendment.

(2) "On quicklime in bulk, 30 cents per 100 pounds."

We fully agree.

(3) "On hydrated lime, 40 cents per 100 pounds."

We fully agree.

Instead of your No. 4, we very much desire to have this line inserted:

(4) On limestone (broken or crushed), 15 cents per 100 pounds.

The word "broken" would take care of our paper-mill customers who burn limestone in limekilns and to whom we ship it in rough, coarse, broken shape. The word "crushed" would take care of our small trade with foundries, smelters, blast furnaces, glass works, etc. These two items are of very great importance to us, and I have not seen anything in any of the correspondence to indicate that it would be objectionable to any of our eastern friends. You will appreciate the value of this trade, particularly when the lime market is very dull in the winter time, in keeping our men employed and also in keeping our quarries clean from the accumulation of spalls. I trust you will support us in that additional feature as it means very much to us in this contest.

(5) (your No. 4). "On limestone (ground or pulverized), in bags, 7½ cents per 100 pounds."

(6) "On limestone (ground or pulverized), in bulk, 5 cents per 100 pounds."

Up to date no ground or pulverized limestone is handled on this coast in bulk, although that may come. We therefore agree entirely with you as to the rate of duty, but for the sake of uniformity, we suggest that under our market conditions it would be better to express the rate in cents per 100 pounds as on the other items.

I realize that you have a large market for that material. As yet it is very small out here but it is growing. There is considerable small trade in less than ton lots. Therefore, if there is no objection by our eastern friends, we would be pleased if the duty on that material might be expressed on the basis of 100 pounds as with the other items. As the rates are precisely the same, we apprehend there will be no objection.

In covering the above I have not had sufficient time to confer with the manufacturers of hydrated lime, but, knowing their minds on the question, I am taking the responsibility of agreeing to the rate which you suggest. I am quite sure it will be satisfactory to them.

EMERGENCY TARIFF.

Covering the remainder of my telegram to Mr. Humphrey, above quoted, I beg to say that acting upon the suggestion contained in your telegram of December 28, I have been actively emphasizing the importance of an amendment to the Emergency Tariff measure now pending in the Senate. Our Seattle Chamber of Commerce wired both our Senators urging such action. I have also brought to the attention of both our Senators, to Mr. Humphrey, to Congressman Hadley, and to other interested parties in Washington. For your information, I am inclosing herewith a copy of letter from Senator Poindexter, dated January 3, and a copy of my reply thereto, dated January 10, and a copy of my further reply, dated January 14. I have been a little bit handicapped in my own mind as to just what to ask our Senators to do along that line as I did not know just what rates of duty the national association, yourself, and other members of the tariff committee, Mr. Humphrey, and other interested parties there might think it wise to propose, although I have pressed the general idea as strongly as I felt was prudent without being able to name a definite schedule which I felt reasonably sure would meet the approval of all the interested parties. Upon receipt of the report of the hearing giving the schedule you proposed, I felt free to ask for something definite, knowing that Mr. Humphrey would be able to express the views of all concerned, I have now asked him to see our Senators, and if he and they approve the effort, to request them to present an amendment to the emergency tariff measure, now pending covering our industry, with a schedule of duties as above expressed.

I hope our Senators will be able to get sufficient encouragement to justify them in presenting the proposed amendment to the present emergency tariff bill, and I am hoping every morning to read that such an amendment has been offered. I trust you will see to it that the Senators from Maine are properly informed upon this subject and will support our Senators in such an effort if they shall conclude that it is wise to make it. Judging of the subject at this long range, which of course, is not very satisfactory, it seems to me that pressing such an amendment before the Senate and the discussion that it would naturally bring forth with the facts that we have been able to present would be a valuable advertising asset to our cause, in its effect upon the general tariff revision bill, even though we did not succeed in securing the emergency relief. You have just been in Washington and have doubtlessly sensed the situation carefully as chairman of our committee. If you think that it would be wise, even though there be little prospect of its passage, to get this subject thoroughly discussed in the Senate, I would suggest that it would be most appropriate for you as chairman of our committee to ask one of the Senators from your own State to present such an amendment, which I am sure would have the hearty support of practically all the Western Senators. It might be more effective for the amendment to be proposed from the Eastern States than from the Western. It seems to me highly probable

that such an amendment offered from the eastern field would likely bring to the support of the measure a number of eastern members who might be inclined to challenge it a little if it appeared to come as a western measure. From my viewpoint here it seems to me it would be good politics to have the amendment proposed from an eastern State, and as you represent one of the largest lime industries of the world, and also specially represent the association as chairman of our tariff committee, it seems to me that the effect would be most salutary if the amendment should be offered by the Senators from Maine. Kindly let me have your view upon this subject.

CHINESE AND HINDU WAGES.

From my letter to Senator Poindexter, dated January 14, you will also observe that I was finally able to secure and present some more definite and tangible facts upon the wages of Chinese and Hindu laborers in British Columbia. I regret exceedingly that I could not get that information in time for the hearing. The discussion shows the importance of that item. I note Mr. Gray admitted they were employing Chinamen in their cooper shops, which I, of course, know to be true, but I expected them to deny it. His admission of paying these Chinese coopers at the rate of $4 per day presents precisely the same situation as exists in the British Columbia coal mines, as outlined in the second paragraph of my letter of January 14 to Senator Poindexter. There the Chinese boiler stokers or firemen are paid $3.85 per day. There are very few firemen employed at that rate. The great bulk of the Chinese labor, representing hundreds of them in these same mines, is paid a lower wage, namely $2.82 per day. In other employment in British Columbia, however, the Chinese and Hindus are generally paid 20 to 25 cents per hour, and they work 9 and 10, usually 10 hours.

Mr. Gray admitted paying their coopers $4 per day. He did not state how many hours they worked, but it is probably 10 hours. The coopers at the lime plants here and in other general cooper shops work 8 hours per day. Most of them work on a piece-work basis and earn $7 to $10 per day, usually about $8 to $9 per day. Thus you will see that while coopers upon this side are earning 87½ cents to $1.25 per hour, the Chinese coopers in Canada are earning 40 cents per hour, or, expressed in percentage, they are earning from 32½ to 45 per cent of the wages of American coopers in American shops. Apparently Mr. Gray was careful not to state just what they were paying their common muckers, rock breakers, wood choppers, and other really common labor about their plants. When he said they paid their Chinamen $4 per day and afterwards admitted that the Chinamen were working in their cooper shops at the cooper's trade, it is a fair calculation that the $4 wage and the $4 Chinaman to whom he thus referred were these coopers, and we are entirely convinced that they are not paying their common run of labor (Chinese) to exceed 25 cents per hour.

Why should they pay more? That is the common rate of wages which the Chinese and Hindus earn in British Columbia. There are many of them there. The Chinese learn rapidly, quickly becoming expert workers. They are born imitators and will learn the cooper's trade in about one-quarter of the time an American will learn it. These lime companies are not in business in British Columbia for their health nor are they engaged in a philanthropic mission to the Chinese labor of British Columbia. They are paying them no more than the going rate of wages of Chinamen, you may depend upon it, and while we have been unable to ascertain the exact schedule of wages they pay for their different classes of labor about their plant, there is no reason whatever to believe that they are paying them in excess of the going wage for Chinamen.

DIFFERENCE IN EXCHANGE.

In my same letter to Senator Poindexter, under the heading of "Difference in exchange," I have to-day received a written, signed confirmation of the circumstance to which I referred excepting that instead of the quotation being 30 cents per barrel below the present market price it was exactly 31 cents below that price per barrel.

MENACE TO OTHER MARKETS.

Especially apropos to the situation all along our northern border and also all along our southern border were one or two of your timely remarks which I wish to heartily approve and emphasize. You said: "The manufacturers in the East face the situation brought about by cheaper Canadian manufacturing costs and the rate of Canadian exchange, which threatens our ability to hold this business against competition from Canada without an adequate protective United States tariff. Building lime in barrels is now being shipped from Canadian plants in the Province of New Brunswick into the State of Maine. The quantity shipped is increasing, and the lime is packed 210 pounds net to the barrel instead of 180 pounds net as required in this country

under the standard lime barrel law, and the Canadian manufacturers are readily absorbing the present inadequate duty of 5 per cent ad valorem.

"The market for building lime in the State of Maine is not large, but there is nothing to prevent in the East a duplication of the situation which now exists on the Pacific coast, where by means of cheap foreign shipping at a marked freight advantage, lime from St. Johns, New Brunswick, could be shipped into the cities of Portland, Boston, or even New York, if no ample protective tariff is set up in opposition to it."

If that is not "carrying coals to Newcastle" I have never seen an example of it. Give the manufacturers in New Brunswick Chinese and Hindu labor at 20 cents to 25 cents per hour on the present basis of wages, and where would you get off in the face of such competition with water transportation? That expresses our situation from Seattle to San Diego "without changing the dotting of an 'i' or the crossing of a 't.'" Furthermore, what assurance have you or has any American manufacturer along our entire northern border, or any American manufacturer along our entire southern border, that such conditions or labor may not face him at any minute? The peon labor of Mexico already represents about the same rate of wages and the same menace to the plant and market of Brother Dittlinger and to all other lime manufacturers along the southern border. Some one may say that they have not the capital by which that peon labor could be utilized. The hearing at Washington clearly suggests a remedy for that deficiency. All they need to do is to go to New York and see the Niagara Alkali Co., its stockholders or friends, and judging from their past action and from their present tenacity before the Ways and Means Committee they would see a beautiful chance to exploit the Mexican labor with their New York capital and drive out all thought of prosperity from the minds of our southern manufacturers.

We might also suggest to you in Maine and also to our friends in Michigan, Minnesota, Wisconsin, and other northern border States that British Columbia is overflowing with Chinese labor, with the railroad trains furnishing convenient means for them to reach St. Johns, New Brunswick, or any other eastern manufacturing center, and the same eastern capital would probably be available to exploit your markets upon precisely the same lines as they have exploited ours and with the same kind and cost of labor. The only insurance any of you have against that is just such a protective measure as we are now seeking.

CHEMICAL PRODUCTION PROTECTED.

This Niagara Alkali Co. and its stockholders assert great inherent virtue in themselves because, forsooth, in their Niagara alkali plant they have used and are now using American lime—even more American lime than they have exported of Canadian lime to the Pacific coast. In the name of all the Gods and little fishes, pray what kind of lime ought an American corporation, itself protected by American laws, use other than American lime?

Chemical products are quite highly protected under our tariff laws, and they are still seeking further protection along many lines. We have been asked by our national associates to aid in their effort and we are cheerfully assisting. We are informed that this same company made millions of profit out of the chemicals it produced and sold to our Government in time of war. What kind of a face can they have which will enable them to ask an American Congress to refuse the legal protection of a kindred manufacturing industry in the United States, and especially one upon which they must largely depend, according to their own statement, for the successful manufacture of their own products? It must be made of brass or iron.

VOLUME OF IMPORTS VERSUS TOTAL UNITED STATES PRODUCTION—NATURAL AND GEOGRAPHICAL PROTECTION.

Comparing the volume of Canadian importations with the entire lime production of the United States is manifestly unfair and done for the purpose of misleading the committee. The great bulk of the 30,000,000 barrels of lime produced in the United States is manufactured throughout the central portions of our country, from east to west, and is beyond the reach of any competition from either border of our country by reason of the geographic distance and prohibitive freight rates. The Atlantic Ocean protects them from the east and the Pacific Ocean protects them from the west, and the railroad tariffs protect them from the north and south. They are as completely protected as though an embargo were raised against all importations.

They are also protected by their neighboring American lime plants situated along our border lines, both north and south, which stand as a buffer system between them and danger or as sentinels to guard their lines from attack by the enemy across the border. These American lime plants near the borders must first bear the brunt of any invasion from beyond the lines, and our manufacturers throughout all the middle

sections of our country are absolutely safe until these frontier lines of manufacturing plants shall have been battered down and destroyed by the enemy. Some of us are occupying just that position just now and have occupied it since 1912 or 1913. Therefore a just or proper comparison of the imports with American production should be limited exclusively to the United States territory in whose markets the importations figure. This means only those near the border and those along either coast which may be reached by cheap water transportation, and without any of the inherent protection represented by railroads, which are expressed in terms of mileage; but let the outposts be broken down and the picket lines be driven in or destroyed and our own friends in the interior will be compelled to wage a battle for their own protection in their own markets. We can not suffer our borders, in any sense, to be invaded by any enemy and still hope for our interior to be safe from the blighting hand of the same enemy. This applies to our commerce as well as to our political existence.

It is also unfair to compare the imports with the total lime production of the United States for another reason. Our own production represented by the 30,000,000 barrels includes a great volume of bulk lime and of hydrated lime. I have not the figures at hand, but I have no doubt those totals would many times exceed the entire output of our own United States product which is marketed in barrels. Bulk quicklime, as you know, can not be imported at all by water and only to very short distances when shipped across the boundary by rail. Its natural physical features would prohibit such bulk importations.

Speaking of hydrated lime on this coast, none whatever has been manufactured in British Columbia until within the last comparatively few weeks. Therefore there has been very little importation of hydrated lime from Canada into our markets until very recently. They are just now beginning to most aggressively attack our American markets for hydrated lime, and therefore manufacturers of hydrate, having the lesson of their destructive policy on barreled lime immediately before them, are appealing to Congress for the protection which they must have or suffer the same results that have been suffered by the American manufacturers of quicklime marketed in barrels.

The only lime, therefore, which they have heretofore exported from Canada to our Pacific coast markets until just now has been quicklime in barrels. It follows, therefore, that the only American market which they have invaded has been the American market for barreled quicklime, and the only fair comparison between the volume of imports and our production on this coast is the comparison between their imports and the output of our American plants manufacturing fresh, barreled lime within the exact territory which they have invaded. They will, of course, go farther inland and invade additional territory if they are not stopped where they are now or at the boundary. But for the purposes of this comparison the Ways and Means Committee and Congress should understand that the only true comparison, representing the injury done by these importations, is to compare their total importations, which is all in barrels, with the barreled lime output of our manufacturers within the territory already invaded by Canadian lime.

To apply this argument I cite the fact that one of our largest producers on Puget Sound, for a number of years, has produced no barreled lime whatever. They have confined their output to bulk lime and to hydrated lime. The importations from Canada have not affected their trade except indirectly until just now when hydrated lime from Canada has appeared. That plant, therefore, with the largest output in the State of Washington for several years last past, can not be considered in the comparison. Another company on Puget Sound has manufactured both barreled lime and hydrated lime. Their output of hydrated lime must be excluded from this comparison. Our eastern Washington manufacturers, our Idaho manufacturers, and our Oregon manufacturers have also sold a large percentage of their lime in bulk and bags, none of which can justly be considered in this comparison.

CALIFORNIA PRODUCTION.

I note from the report of the hearing that Mr. Gray, representing the Pacific Lime Co., stated to the committee as follows: "I do not know what per cent, but I know that the State of California is manufacturing between 900,000 and 1,000,000 barrels of lime a year as against less than 50,000 barrels a year brought into the United States by us."

Question. "You mean that your company brings in 50,000 barrels?"

Answer. "Not to exceed 50,000 barrels this year."

I have not at this moment the exact figures, but I will soon have them and will submit them. I am satisfied, however, that Mr. Gray spoke absolutely wildly in the above quotation. I believe he is either very meagerly informed and was willing to hazard the merest guess upon this proposition, or otherwise he was deliberately endeavoring to mislead the committee. I do not know Mr. Gray, and therefore would

not charge the latter, but I will hazard my own guess that he knew nothing about the subject of which he was talking, and that he simply had been buncoed by some one anxious to deceive him by a highly colored balloon representing the alleged California production, and therefore the enchanting California market patiently waiting for them to despoil. I shall be greatly surprised if the information which I am daily expecting shall indicate that "California is manufacturing" one-half the quantity of lime which Mr. Gray so glibly asserted. I shall be still more surprised if the California territory, in which his company is marketing its lime, produces 300,000 barrels of barreled lime per annum.

Because of climatic conditions, a far greater quantity of bulk lime is marketed in California than anywhere else upon this coast. They also produce and market a large quantity of hydrated lime and bagged lime. Neither their bulk lime nor (in the past) their hydrated lime can be considered in this comparison. The Pacific Lime Co. has marketed none of its product in what is known as the southern California district. That has been and is now the largest market in California, but it is largely supplied by local bulk lime and by hydrated lime. Therefore only the barreled portion of the total California production, which I am sure has been grossly exaggerated, can be considered in this comparison with the total imports from Canada and in that particular territory invaded by them.

In conclusion, therefore, it is manifest that up to this time, so far as this coast is concerned, all bulk lime, bag lime, and all hydrated lime must be excluded from the comparative figures. It is also manifest that all territory within the States whose production is cited, but in which they have not yet attempted to introduce their product, can not fairly be included in the comparison.

From all of the above, therefore, the statement of Mr. Gray that they imported from Canada less than one-tenth of 1 per cent of the entire consumption of the United States is wholly illogical and apparently represents a deliberate attempt to mislead the committee to an absolutely improper and unjustifiable conclusion that their importations to the United States are infinitesimal in quantity, working no appreciable injury upon anyone, and that in consequence they should be permitted, without objection, to appropriate for themselves just that portion of the American trade which is convenient and profitable, regardless of the fact that in so doing they are destroying the American industry of the same kind within that particular territory, because it is so small in volume of production as compared with the total production of the entire United States.

Lime is a low grade, bulky, heavy, cheap commodity. The territory tributary to each particular plant within the United States is a very limited one. Those on the coast line can cover a greater mileage solely because of water transportation, but, as you know, the interior plants are limited within narrow geographic lines. We can not ship into the interior of our country to any considerable distance without any duty to interfere. Neither can they. Their argument really amounts to this:

"We should be permitted to absorb or destroy the American market within our reach because we are not absorbing or destroying that which is geographically not within our reach; and we should not be criticized for destroying those within range of our guns because there are so many other good American manufacturers who are still and always will be beyond our range."

(What consolation or satisfaction is that to their victims?) "We are not slaughtering all of your manufacturers—we are slaughtering only a few of them, but we are slaughtering all we can and hope by the grace of your Congress to be permitted to slaughter more."

The protective power of this Government should be available for any portion of our domain, for any essential industry in it, and, if necessary, for any individual who represents an essential industry to our people. None of us are equally interested in the protective principle along precisely the same lines as our neighbor is interested. It is not a doctrine of personal selfishness among our own people. Why, therefore, should a foreign corporation, whether owned by Americans or foreigners, be permitted to assert or claim for foreigners the doctrine of pure selfishness to foreign interests under a foreign flag?

WHAT THE FOREIGNERS DEMAND.

I wish to further call your attention to the demand of the Pacific Lime Co. made before the Ways and Means Committee in the following language:

"Mr. OLDFIELD. And what are you asking for now?

"Mr. GRAY. Five per cent ad valorem.

"Mr. HADLEY. On the Canadian or on the American lime?

"Mr. GRAY. On the Canadian lime imported from Canada.

"Mr. HADLEY. What do our manufacturers have to pay if they export to Canada?

"Mr. GRAY. It is 17½ per cent ad valorem duty plus 7½ per cent war tax, which has not yet been taken off.

"Mr. HADLEY. How much are you asking for; 5 per cent?

"Mr. GRAY. Five per cent; yes, sir. That is our natural territory—the western part of the United States—for the reason that the market in British Columbia is very limited."

"NATURAL TERRITORY" OF FOREIGNERS OR AMERICANS?

If that argument be sound, then the western part of the United States is the "natural territory" for every producer of every kind and for every nationality in all of British Columbia. Such a doctrine is both monstrous and impudent. If our people and our industries in the "western part of the United States" mean no more to our country as a whole than do the Chinese, the Hindus, the renegade Americans, and the people generally of British Columbia, in the estimation of Mr. Gray, then he is placing a very low and contemptible estimate upon them and is placing an equally low and contemptible estimate upon the obligations of the American Government toward its people who live in the "western part of the United States" and who have devoted their lives and their fortunes to the upbuilding of the industries necessary to support its people.

But since when did the "western part of the United States" become the "natural market" of British Columbia corporations, of British Columbia capital, or of British Columbia labor? To-morrow some commercial Villa in Mexico, some Mexican-American or American-Mexican will be declaring that the southern part of the United States is "our natural market" and some other Canadian or Canadian-American will be declaring that the northern or the eastern "part of the United States" is "our natural market" and the real American will have no "natural market" under his own flag. He will be compelled to leave his own country to find any market at all.

We have always indulged and rather enjoyed the apparent delusion that every foot of United States soil was the natural home, the natural heritage, and the "natural market" of our own people and of no one else upon God's footstool. But we are learning a new lesson or should others be taught one by a forceful action of Congress?

But their "natural market" is rapidly and widely expanding. They admit that they have shipped 2,000 barrels of their lime to Niagara Falls in 1920. Think of it! A shipment of lime, first 100 miles by water (in a foreign vessel) and then (by a Canadian railroad) all the way from British Columbia, a distance of 2,500 miles to a point (in Canada) from which they could blow it across the line into the back door of an American consumer. Not a dime escaped its "natural treasury" in Canada.

No lime manufacturer within the United States could hope to ship his product one-quarter of that distance by rail. The freight alone would exceed the value of the commodity and would far exceed the market price of equally as good local lime at point of consumption. Such a condition would be impossible except under the labor and transportation conditions which exist in Canada.

Let our eastern manufacturers beware. The Chinese camel already has his nose in their tent at Niagara and his neck reaches all the way from British Columbia. The New York or other eastern manufacturer who, in fancied security, has been supplying the Niagara Alkali Co. has already begun to lose his home market. How long will it be until the Chinamen and Hindus of British Columbia will taunt him as they now, in substance, taunt us, namely, "Stop your whining; this also is our 'natural territory,' for do not our masters absolutely own it"? Upon the gilded walls of his banquet room Belshazzar's doom was not half so plainly written.

The land of the Cæsars was once impregnable from outward attack. Its strength at home enabled its sons to carry its flag and its commerce greatly beyond its borders, even to far-distant lands. But when weakened by flabby morale, by weak laws, and by internal neglect of its own "natural" defenses and national defenses, it soon lost all outside respect and became the easy prey of the Goths, the Huns, and the Vandals from the north.

The picture is complete.

The effort to gain foreign commerce by the sacrifice of our own commerce, of our own industries, of our own labor, and of our own means of earning a living at home spells nothing short of disaster, for us all. Even our trader in foreign fields must ultimately suffer the inevitable penalty represented by the destruction of the earth's greatest market, which he is now exploiting for selfish ends, because the purchasing power of our people will certainly disappear along with the disappearance of their earning power.

The commercial Goths, Huns, and Vandals from the north, the south, the east, and the west will then occupy the home of the once-powerful Cæsars, but grown so weak that "none so poor as to do them reverence."

Reciprocity? Yes. But not in those commodities of which we have not only an abundance but a great surplus and for which we ourselves are seeking a foreign customer. Giving away our oversupplied, congested home markets for farm products, or lime, or for anything else and then chasing over the earth to find a market for our still greater and ever-increasing surplus in any particular commodity is nothing short of chasing rainbows. It is commercial insanity. These are serious times, requiring steady thinking instead of rainbow chasing.

The menace to our eastern markets is not imaginary. From the testimony of Mr. Gray there is no other inference than that it is definitely contemplated. Please note the following question and answer at the hearing:

"Mr. OLDFIELD. What you want is that lime from British Columbia is to be shipped to New York and the eastern part of the United States free?

"Mr. GRAY. Well, we are not asking that it be permitted to come in free. But, with the present rates of exchange, at the present time, with the rates as they are, we can do business."

No; but they are asking that our duty be limited to 5 per cent while the Canadian duty is 17½ per cent plus 7½ per cent war tax on an equivalent of 25 per cent, besides various other insurmounntable obstacles. In effect, asking for a duty of 5 per cent on lime and nothing on limestone is almost equivalent to asking duty free, for the reason that such a rate of duty will afford no revenue worth while and will afford no protection at all. In short, our present tariff is equally as pleasing to foreigners as it is distressing to Americans. Can it be conceived that they would ask for a duty which imposed any possible hardship upon themselves? When confronted with Mr. Oldfield's pertinent question, covering the entire length of this country, Mr. Gray frankly admits that under all the present conditions "we can do business." All the present conditions include cheaper labor and further advantages cited in their favor.

ORDERS IN COUNCIL.

Their representative states that the council may reduce rates of duty but can not increase them. He is evidently no better informed upon that subject than upon many others of which he speaks, for that is precisely what they have the power to do and what they actually do.

FOREIGN INVESTMENT.

"Mr. RAINEY. Your offense is that you have invested capital in another country?

"Mr. GRAY. That is the offense. I am one of the offenders. I am one of the stockholders in this company, this Niagara Falls Co., where this company is doing business."

No one claims there is any offense involved in the investment of American capital in another country, but when that capital, so invested, is turned as an engine of destruction against the invested interests in our own country it may readily become both a private and a public offense.

THE ORCAS LIME CO.

Mr. Gray states "they have branched out" and that that company "is really taking trade away from other local companies and taking away some of our trade." We answer that the Orcas Lime Co. was doing business in the Pacific Northwest of the United States for 15 or 20 years before the first barrel of British Columbia lime found its way to American soil. How could that company be taking away any of their trade? At most it could have only recovered some trade which it had previously lost to the British Columbia producers. That company has never in its history operated more than one kiln. Therefore it could not have "branched out" as indicated, and what business it ever did was within the United States and not in British Columbia. It is a small company, but has consistently sought its market along legitimate lines of competition in our country.

OTHER CANADIAN COMPANIES.

The Pacific Lime Co. has erroneously assumed that our objections are aimed exclusively at them. This is far from the truth. We object to the importation of any and of all British Columbia lime under the existing conditions of labor, of transportation, of duty, of exchange, of our tremendous surplus, of our idle kilns, of our unemployed labor, and of all other elements of trade which work to the disadvantage

of the American producer in his own territory. Mr. Gray, himself, states that "one-third of our lime finds its way into the United States. The rest is sold in British Columbia. But there are two other lime-producing companies operated there, one with 3 kilns and the other company has 5 kilns."

The Pacific Lime Co. has 5 kilns, which makes a total of 13 kilns in the "very limited market of British Columbia," without considering the additional limekilns there are in British Columbia and in the western part of Canada. The 13 kilns above mentioned, alone, have a capacity to more than supply the entire needs of British Columbia, the entire market of our own Pacific coast, and still have lime to spare for for the Niagara Alkali Co. at Niagara Falls, N. Y. As I have heretofore pointed out, two of these companies are flooding our coast markets with their product. Another has overrun the entire northern part of Montana, and still another is just now strongly endeavoring to force its way into the market of Spokane, which means northern Idaho and eastern Washington. The Pacific Lime Co., a foreign corporation, has drawn special attention to itself through its appeal to our Congress that it should enjoy some special consideration as a United States competitor because it is owned by Americans and therefore claims to have a better right to enter, to absorb, or to despoil the American market than has any other British Columbia corporation or individual engaged in the manufacture of lime products. We emphatically dispute any such claim and again reassert that, while they have a perfect right to invest their capital in another country and to compete for the trade of that country on equal terms with others operating under the laws and conditions applying to all of them, they are not entitled to any such consideration in our markets in competition with our producers, who must operate under totally different conditions.

Under existing conditions of very limited markets, one barrel of British Columbia lime is as harmful to us as another; for, in their own language, it simply "displaces" a barrel of American lime, and it matters nothing to us by which Canadian ox we are gored.

How can Congress admit one foreigner and reject the other foreigners? Will it play favorites among foreigners and forget its own? Why did not these other foreign companies appear at the hearing? We answer. They simply had not the "gall."

Since the present tariff laws have been in force in both countries much productive capacity has been added to the plants in British Columbia but I know of no increase whatever in the capacity of the plants on this side of the boundary. There has been no occasion for any increase. The Pacific Lime Co. demand, and doubtless all other companies are supporting their request, that these laws which have operated so strongly in their favor shall not be changed. If Congress approves these conditions and desires to see the lime business in British Columbia continue to prosper and expand and to see the same business on our side languish and die, all it needs to do is to grant the appeal of these foreign corporations and deny the prayer of American producers to correct by law the gross injustice against them.

FOREIGN SHIPPING.

The representatives made the frank statement to the committee (speaking for the Pacific Lime Co.) that "all of its product is practically provided for by its own shipping," and that "the only British bottom is our own bottom which we had to purchase." The only surprising feature of these admissions is the fact that when we made the assertion at the previous hearing that their lime was delivered to our American coast markets in British and other foreign bottoms, these same people were almost thrown into convulsions and hastily and vehemently denied our statements which made it necessary for us to go to the public records and produce records therefrom, and also from living witnesses who had received their cargoes from such foreign vessels, that our statement was literally exact. Some of them were British vessels and some of them were other tramp ships flying other foreign flags. They now practically admit all that we ever claimed on that subject. Anyone possessing the least familiarity with American shipping under our present shipping laws knows that the cost of freighting in our vessels under our laws is much greater than the cost under these foreign vessels. Our Government prohibits our use of any foreign bottom in our coastwise trade. We do not criticise it. Congress, in its wisdom, has thought proper to so protect American shipping in our coastwise trade. But, while we are thus rightfully called upon, through higher freight rates, to contribute to this protection of American shipping, it is indefensible that our manufacturing industry should be wantonly sacrificed for that purpose. The protection afforded our shipping by Congress in the coastwise trade represents an absolute embargo against competition for the good of the country. A comparatively few of our people are interested in our shipping and yet we guarantee to them an absolute monoply of that trade for

their vessels, while under our revenue law we are actually inviting foreign producers to use foreign shipping as an additional weapon with which to destroy our own manufacturing industries.

COMPARATIVE QUALITY OF LIME.

They claim great superiority over all competitive brands and compare their product with other brands of lower grades made in the United States, even citing some as "having 45 per cent impurities." They have flooded our whole section of the country with that same kind of propaganda and are now trying to impose it upon Congress. The manifest purpose of such action is to create a false impression by comparing their high-grade lime with other low grade limes. There are both high grade and low-grade limes in this country and there are both high grade and low grade limes in Canada. The Pacific lime is recognized as a high grade lime but when it seeks to impose the impression, either upon the public or upon Congress that its product is superior in quality for any purpose to other high grade brands of lime manufactured on Puget Sound or at other points on the Pacific Coast, it is simply and wilfully misrepresenting the facts, and what is more its representatives know it. Their lime is not needed for any purpose upon the Pacific coast upon the theory that consumers are unable to obtain equally as good and in some respects and for some purposes better lime manufactured by their American competitors on the Pacific coast of the United States. We had made no effort to meet this point prior to the hearing as we could not believe that it would be urged upon Congress, but from a bulletin upon the subject of "spray lime," published by the Washington State College (the Agricultural College of our State, at Pullman, Wash.) in 1917 over the signature of the entomologist of that college, we quote as follows:

"The lime must be from calcium limestone; magnesium limestone or dolomite will not answer. Lime from Roche Harbor is excellent, but much of the dolomite from northeastern Washington is largely or entirely worthless for making lime sulphur spray, although it slakes beautifully."

No other brand of lime is even mentioned in the bulletin. Why?

From a letter bearing date as late as December 2, 1920, upon this subject of "Spray lime," signed by the plant pathologist at the Western Washington Experiment Station, conducted entirely by the State College of Washington, above mentioned, I quote as follows:

"Roche Harbor lime is considered the best we have for this purpose." Why?

We supply the great majority of the orchardists and spray makers in the Northwest, and so long as our lime was in California we supplied practically all of them there Why?

On January 8, two days before the hearing, we called upon Hurley-Mason Co. and Booker, Kiehl & Whipple, who are two of the largest contracting firms, not only in the State of Washington but on the entire north Pacific coast, including British Columbia. They are now and have been for many years large consumers of lime both in British Columbia and in our Pacific Northwest. They have used thousands of barrels of all brands, including the Pacific lime. Our chief object in asking them to wire Congressman Hadley that a full protective duty was necessary was to show just who were benefited and who were injured by these Canadian importations. These two firms promptly and gladly joined in the telegram to Congressman Hadley which he submitted at the hearing. Please note their statements on this subject of quality, reading as follows:

"No better lime is made anywhere than our local Puget Sound brands."

But how about chemical works—real, genuine alkali works, if you please?

Fortunately, we are prepared, without notice, and without any thought of this question arising, to answer their bombastic claims in that field—their own field—also:

The Mathieson Alkali Works, of Providence, R. I., is one of the largest in the world. Just before the war they were also contemplating building a similar plant, not in British Columbia, but in the State of Washington, United States of America.

At their request, through the Seattle Chamber of Commerce, we sent them a large working sample of our lime and limestone. It was not a picked sample. The sample of limestone was taken from our spall dump of many thousand tons, representing the small pieces of limestone taken from our seven operating quarries and dumped indiscriminately together over the bank, and shoveled up indiscriminately into a nail keg. Later we received a letter from them, of which the following is a complete copy:

"Analysis of Roche Harbor limestone.

"THE MATHIESON ALKALI WORKS (INC.),
"*Providence, R. I., September 4, 1917.*

"DEAR SIR: Referring to yours of August 31, I am pleased to give you the report of analysis received from Saltville in regard to sample of limestone from the Tacoma & Roche Harbor Lime Co.:

	Per cent.
$CaCO_3$ (carbonate of lime)	99.63
$MgCO_3$ (carbonate of magnesia)	.17
Insoluble	.20

"It seems to be slightly better than the analysis printed on your analysis card. The product seems to me a most remarkable one.

"EDWARD E. ARNOLD, *President.*"

This completely disposes of the claim of superiority for chemical requirements and of the hocus-pocus of this Niagara competitor that they were obliged to go out of the United States to find satisfactory limestone for their particular "alkali" business. With amazing presumption they express great surprise that American lime manufacturers, through their attorney, should puncture and explode this bubble of absolute fraud with which they are endeavoring to deceive the committee. Why?

The above wholly disinterested testimony coming from such authoritative sources as our State agricultural college, from the two important contracting firms mentioned, and from the Mathieson Alkali Works, engaged in their own line of chemical manufacture, answers for us, without need of further comment, their extravagant claim of superiority for the British Columbia product and their evidently deliberate purpose to deceive the committee by comparing their high-grade lime with the American low-grade lime and forgetting to compare their high-grade lime with American high-grade lime with which they are in competition on our coast.

We could have filled the entire record in this case with similar telegrams and letters had we deemed it necessary or important to meet that question, and can do so yet if it is required of us to show that American lime of at least equally high quality for every purpose is within easy reach of every consumer upon the Pacific coast or elsewhere where Pacific lime has gone or will ever go. But from the above we will not be charged with firing blank cartridges, whose chief office is to "make a noise."

INJURY TO AMERICAN PRODUCERS.

Long and loud have been their claims that they are not injuring anyone on this side of the line; that "we are not cutting into anyone else's business," and "the Pacific Lime Co. is not in any way injuring the lime business of the United States." This gross misrepresentation thoroughly permeates and saturates the whole of the record which they made before the committee.

We must again quote Mr. Gray's statement before the committee:

"Mr. TREADWAY. You mean your company brings in 50,000 barrels?

"Mr. GRAY. Not to exceed 50,000 barrels this year."

Mr. Gray was, of course, referring to the year 1920. The collector of customs of the port of San Francisco reports that approximately 60,000 barrels were imported through that port from Canada in that year. No Canadian lime other than Pacific lime was imported through that port.

We have made every effort to ascertain the quantity of lime imported from Canada through the district of Puget Sound in 1920 and in previous years back to July, 1918. I have the figures prior to this last date. Three times the collector of customs of this port has written us that the records of his office do not show this simple but important information, and when pressed for the figures, after writing to Washington, he advised us that this information can not be secured from the records at Washington, D. C. A remarkable state of affairs. I am therefore unable to furnish the committee from the proper public records the exact importations into this district for 1920. We have kept pretty close check on it, however, and believe it is not short of 40,000 to 50,000 barrels. It may exceed that quantity. Their own representatives were claiming 100,000 barrels some time before the year ended. That may have included the State of California. At any rate it is safe to say, without exact official figures, that the importations of that company alone for 1920 were at least 100,000 barrels, or double the quantity Mr. Gray stated. I trust some public record may be unearthed by the committee which will show the exact figures, as I desire to do no injustice to Mr. Gray. But there can be no doubt but that in that statement he was handling the truth with the

same degree of recklessness that he indulged in many other instances, as disclosed by the record. I am quite certain that the actual importations by his company in 1920 did "exceed 50,000 barrels" by at least 100 per cent.

But either quantity would seriously "injure" the business of United States manufacturers in the territory in which they sold it. It would not be "one-tenth of 1 per cent," as claimed, but would be a large percentage of the total quantity of barreled lime so sold. And yet they say: "We are not cutting into anyone else's business." It represented the total displacement of just that much American lime in their own war-depleted markets and at a time of the greatest stress in our history, when not more than two, if any, American companies on this coast sold an equal quantity of barreled lime in their entire markets, both domestic and export.

To their total imports (whatever they may be in exact figures) must be added the imports from other British Columbia manufacturers into the Pacific Northwest of the United States.

For any one to belittle the injury done and the extent of their "cutting into anyone else's business" is simply trifling with the truth.

We have read with great interest the affidavit and long list of letters introduced by them and shown in the record from page 302 to page 311, inclusive. The affidavit and, with very few exceptions, these letters are signed by dealers interested in boosting Pacific lime. With but two or three exceptions I recognize the familiar names of dealers and manufacturing consumers who were formerly, and many of them for long periods of time, much appreciated customers of our own company. Many of them had dealt with us for from 10 to 30 years, and we confidently believe that had it not been for the loss of our own vessel in 1915 and the war interruption to shipping on this coast those in California would still be dealing with us. The British Columbia people were able to reach that market by the use of tramp foreign steamers which were denied to us.

The Pacific Lime Co. was (fortunately for them) able, by reason of these war conditions affecting shipping, through some of our old representatives in that field, as disclosed in the record, to grasp a large share of the large California trade which we had built up by years of effort. With a proper protective tariff to offset their advantages in shipping by foreign tramp steamers and in their manufacturing operations in British Columbia, our California trade, at the beginning of the war, at least at the time our vessel was lost in the spring of 1915, would naturally and properly have gone to the California producers.

I regret the apparent necessity of referring especially to two or three letters which they have placed in the record. The affidavit and 19 of the 22 letters published, represent the activity on their behalf of Mr. Edward H. Horton, of San Francisco. Mr. Horton discloses the fact, under oath, that he is the special representative of the Pacific Lime Co. of British Columbia, for the State of California and for the export trade. His interest as an importer as against California production is therefore established by himself under oath. His activity as shown by dates, by the address, and by the similarity of the California letters, emphasizes his interset as an importer. We do not criticize this, but it simply shows that the evidence he has submitted in all of this material was inspired by his personal interest and diametrically against the interests of the lime manufacturers of his own State. He is more interested in his commission on this Chinese lime than he is in the welfare of the industries of his own State.

It is also significant that he takes particular occasion to slur the veracity of certain lime manufacturers, by name, whose statements have heretofore been made before the committee. Mr. T. J. Fleming is one of the most prominent manufacturers of the State of California, and was selected by the War Industries Board as director of district 14, comprising the entire coast and all contiguous States.

Mr. Horton's own letter discloses that for many years he represented our lime in San Francisco. Our relations with Mr. Horton were both cordial and confidential. He was regarded and treated not only as a friend of our company but of myself and of my family. I have been entertained frequently in his home, and he in mine. It is with extreme regret and pain that I observe from his affidavit and letter an advertisement of his own astonishing betrayal of that confidence and friendship by the publication of extremely confidential information which he says I extended to him at a time when he was a trusted guest of our company and of my family in my own home at Roche Harbor in 1913. I feel that any further comment is unnecessary upon either his statements or his activities. It shows only to what lengths some men will go in injuring a friend when tempted by financial interest. In making this statement I am calling attention only to what he himself has put in the record against himself. I leave it to him to square himself with his own affidavit and letter. Many of his statements, however, could not be supported by the facts.

The J. McCraken Co., of Portland, Oreg., occupies a relation to the Pacific Lime Co., of British Columbia, similar to that occupied by the Horton Lime Co. in San Francisco. They are a general agent for that lime in Oregon and other territory and supply numerous small dealers and consumers in that field. They are not an ordinary local dealer but a jobber as well, and are therefore interested in all of the trade of the smaller dealers whom they supply. They have an exclusive contract for that State, and of course do not want to see the duty increased, as that would make it more difficult for them to push their imported lime in those markets. Their relation to this controversy is equivalent to that of an importer or of the foreign corporation itself as its direct agent.

As we have shown, Pacific lime is necessary only to themselves on account of their commissions. They are not interested in the orchardists whose interests are fully protected by American brands of lime.

For 30 years the J. McCracken Co., through the reign of the honored grandfather and the father of the present representative of the family, had handled Roche Harbor lime exclusively in that territory. We had aided materially in building up an enviable and exclusive lime trade in the hands of that house. A most intimate business and family relation resulted. Suddenly, without a word of warning or an intimation of dissatisfaction and after a long contest to hold their trade against this same foreign corporation, the present McCracken deserted our camp and entered into an exclusive contract with this British Columbia competitor of ours and of theirs, and so far as he was able to do so, turned over our Roche Harbor market in that territory to the enemy. What inducements were offered we do not know.

And yet they say they "are not cutting into anyone else's business."

I note also the letter of Sam Hunter & Co., a lime dealer of Seattle. Mr. Hunter is a Canadian. Whether he is naturalized I do not know, but he is one of the chief boosters for Canadian lime in this part of the country. I have not been able to learn of any American manufacturer from whom he buys a single barrel of lime. Of course this is his privilege, but he is far more interested in building up Canadian industry than he is in aiding American industry.

The general representative of the Pacific Lime Co. for the United States and export trade is a very active, energetic, and personally agreeable gentleman whose letter appears on page 321 of the record. He also is a Canadian, and although he has lived in our country for many, many years, has enjoyed all the protection, the privileges, and the benefits of American citizenship both for himself and for his family, he has not appreciated it sufficiently to become an American citizen even by adoption. Nevertheless, he has the audacity to demand and to claim over his own signature an "equal right in this territory" with any native-born son of the household * * * and because "we pay the full duty tax demanded by the United States Government we are entitled to equal protection by that Government" to that enjoyed by anyone to the manner born. As their limestone is admitted absolutely free and no "duty tax" is demanded are we to understand that such protection, such privileges, and such benefits, in their estimation, are worth absolutely nothing?

If any foreigner can camp indefinitely upon our soil and then successfully maintain any such demand or claim as this, please tell me what is the value of American citizenship?

THE PRICE WAR.

Which price war? When? Smoke screens are convenient shelters when one is desperately pressed. Mr. Gray talked most volubly about "price cutting wars," "Waterloos," the details of other people's business, history of the lime industry on the Pacific coast, etc., just as though he actually knew something about those matters. A stranger might think he did know a little something about the subjects of which he spoke, but to one informed as to the facts, his story is both ludicrous and silly.

There have been two notable price wars on this coast. He stages the Cowell price war with most effective scenery—even has a "Waterloo" on the curtain—but has a convenient memory regarding the price war waged in these same markets by the Pacific Lime Co. He does not even mention it. One was a natural contest between local lime companies for market supremacy, the other was a united defense by all American producers against a common invading enemy.

As to the Cowell price war, he must have had a Rip Van Winkle slumber, for that contest had ended and was musty with age more than 10 years before the Pacific Lime Co. was born, and except their own, there has been none since. While there has always been (and there is now) keen competition between the American producers, there has been no "price-cutting war" in these markets since 1897 until the Pacific Lime Co. inaugurated one in 1912, but which he forgot to mention. He has invited me out of the record far enough to justify me in stating that from 1898

to 1912, both inclusive, and without the omission of a single year, the Tacoma & Roche Harbor Lime Co. made good profits every year, and during that same period not only enlarged its plant but paid very satisfactory cash dividends to its stockholders from such profits. Napoleon himself would not recognize such a picture of "Waterloo." If that be the meaning and lesson of "Waterloo" let us have more of them. Those conditions had absolutely nothing to do with the situation since 1912, nor at the present time.

Mr. Gray says they bought that company in 1913. We call special attention to the official report of Mr. W. B. Henderson, a special agent of the Department of Commerce, made in October, 1914, upon the lime industry of the Pacific Northwest, and which report is now on file in that department. Mr. Henderson had been directed to make a special and exhaustive investigation of this whole subject matter, and of the contest which had been raging. In his report Mr. Henderson quotes from the prospectus of this same British Columbia Lime Co., in which they use this significant language: "The sudden rise of the Pacific Lime Co. could only take place by displacing others." And further they say: "The struggle lasted during the whole of the year 1913, and severe rate cutting resulted, with the result that lime was sold at unremunerative rates, and some of the smaller American companies went out of business, but the superiority of the Pacific company's lime and the position it held in the markets enabled it to overcome this opposition."

Is this the "Waterloo" of the gentleman's fancy?

This shows that the present owners bought this company at a time of a price war in which the previous owners were then engaged; that they were seeking trouble from the beginning; that Mr. Gray was again woefully mixed upon his dates and his facts; that the only price war affecting this controversy was not the so-called "Cowell war," which was more than 10 years dead and buried—but his own war, which was then a living, burning issue.

Such wild assertions lead one almost irresistably to the conclusion that a certain institution at Niagara might be suspected of being a fact factory instead of a chemical factory.

In all of this defense of our markets the Henry Cowell Lime & Cement Co., the Tacoma & Roche Harbor Lime Co., and all other American companies have been and are now a solid unit against this foreign invasion, and in this appeal to our Congress for a just and equitable tariff law which will enable us to live and compete with Americans for the American trade but not with foreign corporations enjoying overwhelming advantages.

Some peculiar coincidences occurred in that year of 1913. Mr. Gray says they "bought the Pacific Lime Co. in 1913."

Mr. Henderson's report quotes their prospectus, declaring: "The struggle lasted during the whole of 1913."

The present tariff act placing limestone on the free list and dropping the duty on lime to 5 per cent ad valorem became a law on October 3, 1913.

I am not sure as to the exact date, but I think the present Canadian tariff act was also passed in 1913.

I have often wondered what relation these coincidences in that eventful year bore to one another.

This price war was quickly followed by the great World War, and the market for lime on our own Pacific coast comparatively disappeared. Building operations were paralyzed. Output dropped almost to the vanishing point. How passing strange that this foreign company should have been able year by year to steadily increase its American trade in the face of these conditions and the steadily decreasing total demand. Cheaper labor, cheaper fuel, cheaper barrels, cheaper transportation, unjust and discriminating tariff laws, difference in exchange, etc., furnish a complete and convincing explanation.

PERSONALITIES.

I regret that illusions of a personal nature have invaded the record of this hearing. This is a question of public law as well as of both public and private justice. The record itself shows that our side is not responsible for these personalities. In support of this statement I invite attention to our written statement of the whole subject. Not one personal reference can be found. But the opposition has dragged into the hearing, by oral statement, by letters, and otherwise, so many purely private and personal matters that we have been left no alternative except to answer the statements made or to suffer such interferences as our silence might signify.

I disclaim all personal animosity in this discussion toward anyone. I have never met Mr. Gray. I refer only to his statements as disclosed by the record. In fact,

I have no personal acquaintance with any of the stockholders or officers of that company except its president, Mr. E. D. Kingsley, who extended to me the courtesy of a few minutes call at my office on one occasion only. Our interview was entirely pleasant, and he impressed me as a gentleman. In that interview I assured him that I was not animated by any personal feeling. He told me that he himself was an ardent protectionist. I fear that he is the kind of a protectionist illustrated by the small boy who when asked what his father's business was, said: "Daddy is a Methodist, but he is not working much at his trade just now."

Protection upon all I sell, free trade upon all I buy is not "working much" at the protectionist trade. Even when they go to a foreign country or send their capital there to profit by its cheaper labor or other advantages their confession of faith is:

"I believe in protection—even prohibitive protection—in the home market of my foreign plant, but I favor free trade for my foreign products in every other market of the world."

Unfortunately we have too many protectionists of that school.

Protection for what I sell, free trade for what I buy, is too supremely selfish to be defensible in trade, in ethics, in conscience, or in law.

INSPIRING MOTIVE.

Behind every important act of human endeavor there is an inspiring motive either commendable or otherwise. What was the motive that inspired these New York gentlemen to invest three-quarters of a million dollars in this enterprise in British Columbia and from that most advantageous standpoint attack the markets of the "western part of the United States?" Certainly not the limited market of British Columbia. Fortunately there is no conjecture about it. We have the answer plump and full from the lips of Mr. Gray himself. Note the record.

"Mr. TREADWAY. Are you contemplating any expansion of your export trade?

"Mr. GRAY. Absolutely not. We are simply waiting to take care of our own business when we can put up a factory on the Pacific coast. In the meantime we have got to live if possible."

What Pacific coast? The Pacific coast of Canada and not the Pacific coast of the United States. What motive? "We have got to live, if possible." No matter who else dies, "we must live." "What care we whose ox is gored so long as our ox is safely protected in Canada?" Evidently it never occurred to Mr. Gray that American producers as well as themselves are entitled to live at least. Furthermore they are entitled to the enjoyment of that life on their own soil and under their own flag, free from attack, free from injury, free from injustice, free from any foe, commercial or otherwise.

Is it possible that any foreign corporation "has got to live" at the expense of any American citizen or any American industry? And must our Congress at their behest become the executioner of American citizens or American industry because, forsooth, these foreigners "have got to live?" We absolutely deny this presumptuous and unconscionable doctrine. They have not "got to live" and they are not even entitled to live at the expense of the United States or of any of its people. Let them look to Canada and to its Parliament which, by erecting an unscalable tariff wall, for their protection has already dealt most generously with them. We have heard of the man "without a country," but how blessed is the man who can demand the protecting power of two countries because "he has to live, if possible."

He further says "the market in British Columbia is very limited." True. Let the Canadian Parliament and not the American Congress furnish him with a larger market because the American producer is entitled to live just as much as he. We expect no magnanimity in either Canada or in Mexico in either their laws or their trade. We have been distinctly advised that we need have no hope in that direction. We frankly admit that we are not entitled to have any. As that market is very limited, as truthfully stated by Mr. Gray the Canadian Parliament has wisely and humanely practically forbidden all interference from outside competition. We take off our hats to that kind of protection, but "what is sauce for the goose should be sauce for the gander." The question is thus plainly put to our Congress. Are the American people entitled to expect at the hands of Congress such conditions under public law as will, first of all, entitle them and then as far as possible enable them "to live" in their own country, while leaving to other countries the duty of legislating in the interest of the people who live in such other countries?

JOHN S. MCMILLIN.

GEORGE B. WOOD, REPRESENTING THE ROCKLAND & ROCKPORT LIME CORPORATION, ROCKLAND, ME., AND THE NATIONAL LIME ASSOCIATION.

Mr. WOOD. As an individual manufacturer, I speak for the Rockland & Rockport Lime Corporation of Rockland, Me., and as the chairman of the committee on tariff and a member of the board of directors, I speak for the National Lime Association, which represents 75 per cent of the manufacturing lime industry of the United States.

Mr. Humphrey has outlined the situation, particularly as it exists in the northwestern territory, and it is my purpose to outline the situation as it exists in the northeastern territory, my particular location as a manufacturer, and for the entire industry along the Canadian border.

The lime business itself is divided into three important classifications: First of all, the one most commonly known, of lime for building construction work; secondly, lime is a basic and most important chemical reagent used by something like 140 different manufacturing industries in their chemical processes. On that basis it was given a preference by the War Industries Board during the war, by reason of its necessity in the manufacture of a great many important commodities in this country. Its third important use and the one that is growing the most rapidly is its use in agriculture. My particular company manufactures and ships, in a normal year, approximately 100,000 tons, or, put into terms of barrels, a million barrels of lime sold for building construction, for agricultural purposes, and for these industrial uses.

We also ship, in a normal year, approximately 25,000 tons of limestone in broken and crushed form for construction purposes, road work, and for chemical uses, and in pulverized form for agricultural purposes.

The paper mills of the States of Maine, New Hampshire, and Vermont use annually in excess of 75,000 tons of lime. The high-calcium lime for soda pulp and sulphate pulp manufacture is shipped principally from Maine. The magnesian lime for sulphite pulp manufacture is shipped principally by the Lee Lime Co., with plant at Lee, Mass. The lime for bleach purposes comes principally from manufacturers located in the States of Vermont, Massachusetts, and New York. Some of these paper companies have plants located in Canada as well as in the United States.

The manufacturers in the East face a situation brought about by cheaper Canadian manufacturing costs and the rate of Canadian exchange, which threatens our ability to hold this business against competition from Canada without an adequate protective United States tariff. Building lime in barrels is now being shipped from Canadian plants in the Province of New Brunswick into the State of Maine. The quantity shipped is increasing, and the lime is packed 210 pounds net to the barrel instead of 180 pounds net as required in this country under the standard lime-barrel law, and the Canadian manufacturers are readily absorbing the present inadequate duty of 5 per cent ad valorem.

The market for building lime in the State of Maine is not large, but there is nothing to prevent in the East a duplication of the

situation which now exists on the Pacific coast, where by means of cheap foreign shipping at a marked freight advantage lime from St. Johns, New Brunswick, could be shipped into the cities of Portland, Boston, or even New York if no ample protective tariff is set up in opposition to it.

The National Lime Association, supported by assessments and by lime for demonstration purposes furnished by its members, is expending $130,000 annually for the promotion of the uses of lime for all purposes. A large portion of this work is devoted to the promotion of lime for agricultural purposes, working in cooperation with the various State departments of agriculture in a common effort to educate the farmer to a better and more extensive use of lime. My company's total expenditure is in the neighborhood of $5,000 per year for this agricultural promotion work, but such expense is entirely hopeless, both from the point of view of commercialism and the point of view of public welfare, if limestone deposits in Nova Scotia, New Brunswick, and Quebec continue to be developed to supply this market with pulverized limestone as rapidly as we develop it by our own efforts and at our own expense.

The statistics of exports show that United States manufacturers have lost the greater part of business formerly enjoyed at the rate of 277,000 barrels of lime shipped into Canada in the year 1914. The shipments from this country into Canada in the year 1920 had fallen to 54,000 barrels. The statistics of imports covering lime shipped into this country show an increase from 21,440 barrels in the year 1915 to 147,980 barrels shipped into this country for the first nine months of the year 1920. The total loss, to the American lime industry during this period is, therefore, in excess of 349,540 barrels annually.

Mr. GARNER. What is the total production in this country?

Mr. WOOD. The total production of lime in this country is about 3,000,000 tons, or 30,000,000 barrels.

Mr. GARNER. And the importation is a hundred and some thousand barrels? Is that pretty keen competition?

Mr. WOOD. Not as compared with the lime industry in the whole country. The lime is manufactured in almost every State of the Union.

Mr. GARNER. You know, my friend here on the right wants to levy a duty in the interest of protection—or in the name of protection. I want it in the name of revenue. So neither gets anywhere on your commodity; I get no revenue, nor does he get protection, when we only ship in lime in quantities less than one-fourth of 1 per cent. It does not seem to me very keen competition. The statistics show we get a little over $6,000 per year revenue from it. So I think neither Mr. Fordney nor myself could consider very seriously either protecting the industry or getting money into the Treasury.

Mr. WOOD. From your point of view it would appear, then, that it would be policy to abolish and let go out of business those plants that do happen to be located along the border line, as a better thing than to protect them, considering the whole industry of the United States. Lime is a product that does not sell at a high price. It is manufactured in so many places that it can not stand shipment

at excessive freight rates, therefore every plant's radius of operation is naturally limited by its geographical position.

Mr. GARNER. If you have an industry in this country where less than one-fourth of 1 per cent of the article comes from a foreign country, do you think you ought to come in and ask that that one-fourth of 1 per cent be shut out? If we apply that to every other business, there will be no chance of any other country doing business with us.

The CHAIRMAN. Mr. Wood, what is the difference between the Canadian cost of production and your cost? You come directly in competition with that in the district where you manufacture?

Mr. WOOD. In the districts where we manufacture, yes.

The CHAIRMAN. Do you know the difference between your cost of production and theirs? If you have that we would be glad to have you put it in.

Mr. WOOD. I have that in my brief. We figure that they have an advantage, considering the cost of lime packed in barrels, but put on the ton basis, as I mentioned tons in these figures—they have a labor advantage of $1.50 a ton. They have an advantage in manufacture on the labor and the material in the packages of $1.50 a ton, and we figure that they have, on the present market price of barrel lime, an advantage in the neighborhood of $3.30 a ton on the rate of exchange, and the people of the Pacific coast, as Mr. Humphrey has outlined, are further handicapped, as we might be in the East, by a dollar a ton difference in the rates of transportation.

The CHAIRMAN. In other words, they can sell lime over here for gold and go back with that gold and buy their own depreciated currency and pay their bills with it over there?

Mr. WOOD. Yes, sir.

The CHAIRMAN. They have that advantage over you. Whatever the difference between their depreciated currency and ours, they have at least that advantage over you, to say nothing about labor cost and cost of barrels and raw materials?

Mr. WOOD. They have that at least. We might expect to find that on their depreciated values so near our country their base of wages would be higher, but that is not the case.

Mr. GARNER. What is the rate of wages in Canada, compared with the wages in the United States?

Mr. WOOD. In Canada the gentleman from Vancouver testified this morning that they were paying $4 a day.

Mr. GARNER. What do you pay?

Mr. WOOD. I understand from a Congressman from the State of Washington they are paying $7.75 a day.

Mr. GARNER. I did not ask you about Washington. I asked you what you paid?

Mr. WOOD. In the State of Maine we are paying $4.05 for the cheapest day labor, but the majority of the labor in the quarries, when working, ranges from $5.50 to $6 a day.

Mr. GARNER. So they have an advantage over you of 5 cents a day in the labor, and you have an advantage over them of 5 per cent ad valorem under the present law?

Mr. WOOD. No; I believe they have an advantage over us of $1.50 to $2 a day, which is the difference between $4 and $5.50 to $6.

The CHAIRMAN. The cheapest rate you named was $4.05. The average wages in your operation are about how much—$5.50?

Mr. WOOD. Our average wages would run between $5 and $5.50, covering all classes of labor.

Mr. GARNER. Mr. Wood, I have been in three different hearings in making up tariffs, and I believe this is the first time I ever heard strenuous efforts made to get a protective tariff to exclude one-fourth of 1 per cent of an article being imported into this country upon the theory that if we did not increase it, it would put you out of business. When we produce in this country 99¾ per cent of the product used by the people, and you only import one-fourth of 1 per cent, and then say to the American Congress, "If you don't give us a higher rate of duty, or something, you are going to put us out of business," I can't understand it.

The CHAIRMAN. I may be able to correct the gentleman's theory. You have not asked for an embargo. You have not asked for a prohibitive rate of duty—or do you ask for that?

Mr. WOOD. No; we ask for a duty that will protect these particular manufacturers that are located in this country, where it is possible for them to have any export business at all, or where it is possible for imported lime to come into this country.

The CHAIRMAN. Mr. Wood, would you be satisfied with a duty sufficiently high to bring up the Canadian cost to your cost, laid down in Maine?

Mr. WOOD. That is all we ask for. As Mr. Humphrey has outlined, we think we are entitled, under the circumstances of unfair trade practices, when it is necessary, to a protective duty sufficient to prevent the manufacturer from——

Mr. GARNER (interposing). In making such a law we can not make one for Maine and one for Washington. The law must apply to the whole country alike. According to Mr. Humphrey, Chinese labor is being used in British Columbia. It is costing him $6.50 a day. The same labor conditions are common to his country and Maine. The wages are about alike in each. So which would you consider was in the greater need of protection, Washington or New England?

Mr. WOOD. I think the one that is so effectively damaged at the present time—the industry in Washington.

The situation is most critical in the Northwest, where lime manufactured in British Columbia is absorbing practically all of the markets in this country formerly enjoyed by the lime manufacturers located in the State of Washington. We maintain that a tariff should be made ample to protect these manufacturers, and such a tariff would in turn be ample to protect the manufacturers in all parts of the United States. The advantage of the Canadian manufacturer because of the employment of Chinese labor, the use of foreign ships, and the difference in the rate of exchange has been calculated on the basis of 100 pounds of lime and on the basis of a barrel of lime (200 pounds, including package), and is found to amount to the following: Fifteen cents per barrel advantage in labor cost; 15 cents per barrel advantage in cost of packages; 33 cents per barrel advantage due to rate of exchange; 10 cents per barrel due to cheaper shipping rates; 27 cents per barrel, the margin which can readily be absorbed from overhead costs and profit by a Canadian manufacturer using

unfair trade practices to introduce his product—a total advantage of $1 per barrel, or 50 cents per 100 pounds, which we feel should be the protective tariff against lime in barrels shipped from Canada.

The advantage in labor costs and rate of exchange are not so large in the case of hydrated lime shipped in paper bags, and in the case of quicklime shipped in bulk. We figure that on these products a protective tariff ample to cover conditions as found in this northwestern territory should be 40 cents per 100 pounds on hydrated lime and 30 cents per 100 pounds on quicklime shipped in bulk. Pulverized limestone for the use of the farmer is a product sold at a close margin of profit, and its manufacture does not entail the amount of labor required in the processes of burning and packing lime. We feel, however, that a protective tariff should be named on this product, which is at the present time protected by Canadian tariffs, at the same ad valorem rate as lime. The American manufacturers feel that a tariff of 7½ cents per 100 pounds or $1.50 per ton should be named on this product, which amount is necessary in order to cover the advantage of the rate of Canadian exchange and somewhat cheaper Canadian labor costs in the processes of manufacture.

BRIEF OF THE ROCKLAND & ROCKPORT LIME CORPORATION, ROCKLAND, ME., AND THE NATIONAL LIME ASSOCIATION.

Lime in its different forms is used in a very large variety of ways in American industry. In addition to its well-known use in mortar and plastering materials for construction purposes, it is a very important reagent in chemical manufactures and other chemical processes of manufacture and purification. It is also rapidly assuming an important place in agriculture as a means of soil improvement and in the manufacture of spray materials and insecticides.

The five-hundred-odd plants of large and small size are scattered over nearly every section of the United States, but have concentrated most heavily along the northern one-half of the country. A great majority of these individual plants are of small size with limited financial resources. A few manufacturers have attained to large business organization, having a number of individual plants. One hundred and twenty-four of these manufacturers, whose aggregate product represents something like 75 per cent of the total tonnage of lime materials produced in the United States, are associated for educational and research purposes in the National Lime Association.

The raw material—limestone—from which lime is made is widely distributed in the country and occurs in large deposits, but the material is of a widely variable composition and mode of occurrence, and deposits favorably situated for commercial development are relatively limited in number and extent. This creates a diversity in the industry, which has led to the multiplication of plants and has maintained the business on a basis of small margins.

Since the beginning of the war period the lime industry has suffered rather severely, especially in the construction field, from restrictions on the building industry, levied by Government enactment and by the numerous other well-known restrictions which have operated against the lime industry, and in a large measure have affected other uses of lime.

There has been a considerable business in the export and import of lime for a number of years. The export situation will be touched further on this brief. The imports from all sources for the last 11 years are shown in the following Table I:

TABLE I.

	Short tons.		Short tons.
1910	6,498	1916	7,959
1911	5,232	1917	7,811
1912	4,268	1918	7,854
1913	4,189	1919	8,858
1914	3,455	First nine months 1920	17,190
1915	2,144		

While this material has come into the United States from a large number of sources, the imports from other countries than Canada have been relatively small in volume. Canada has been the big source of imports of lime into the United States, as is shown by Table II.

TABLE II.—*Imports of lime from Canada.*

	Tons.	Per cent of total imports.		Tons.	Per cent of total imports.
1913	2,998	76.9	1917	7,871	98
1914	2,384	75.1	1918	7,077	96.8
1915	2,696	81.4	1919	8,358	100
1916	4,611	95.7	1920		

The distribution of these imports to the different customs districts in the northern part of the country, which shows that the imports have tended to concentrate in western sections of the country, is shown in the following Table III:

TABLE III.—*Imports by customs districts.*

[Short tons.]

	1914	1917	1918
Maine and New Hampshire		310	789
New York	680		25
Buffalo		103	7
Duluth and Superior		20	1,132
Montana and Idaho		16	110
Washington	1,711	4,131	3,429
San Francisco		380	1,627
San Antonio, Tex			209
Laredo, Tex		129	

The customs districts of Washington and San Francisco have received the largest proportion of material. This situation will later be explained in further detail.

DISTRIBUTION OF LIME PLANTS AND POPULATION.

To properly sense this situation it is important to have in mind the distribution of population along the northern border of the United States, which is especially represented by such large cities as those on Puget Sound in Washington, Duluth, Chicago, and adjacent ports on Lake Michigan, and Detroit, Toledo, and Buffalo farther east, all of which are located on bodies of water convenient for transportation from Canada.

The distribution of lime plants on the two sides of the international line is shown by the map, Exhibit A, which represents the fact that there is a large concentration of such plants in the States bordering the Canadian line throughout the entire length of the United States, and a corresponding large concentration of lime plants in the adjacent territory of Canada. To a large extent the plants on the two sides of the line are located on similar limestone formations. The Canadian plants are abundant through the St. Lawrence Valley from the region of Quebec to the lower part of Ontario. Other very important deposits occur in British Columbia adjacent to the bays and straits upon which Seattle and Olympia are located.

Since 1910 the Canadian Government has maintained a duty on lime products imported into Canada amounting to 17½ per cent ad valorem on quicklime, and the same duty on pulverized limestone, which also applies to the value of the package. On hydrated lime the duty is 12½ cents per 100 pounds. During the war there was an additional tax on all these materials of 7½ per cent ad valorem. The import duty on lime coming into the United States from 1897 to 1913 was 5 cents per 100 pounds, not including limestone. Since 1913 the duty has been 5 per cent ad valorem.

Somewhat different business conditions affecting this commodity have existed in the eastern half of the United States from those on the west coast. The statistics of the lime industry and their exports and imports in the eastern half of Canada seem to indicate a growing strength of their lime industry and increased aggressiveness in seeking foreign business.

For a good many years American manufacturers have enjoyed a considerable business in the shipment of lime to Canada. This is indicated by Table IV, showing the exports of lime, which has been chiefly to Canada:

TABLE IV.

	Tons.		Tons.
1915	16,223	1918	14,253
1916	23,973	1919	6,801
1917	18,794	1920	5,442

It is evident that some forces are operating to curtail shipments from the States. The Canadian duty on imports may fairly be regarded as a factor in this curtailment of business coincident with the increase in strength of Canadian manufacturers backed by that protection. We regard it as fair to urge upon your committee that American manufacturers should have reciprocal protection to at least this extent irrespective of other factors later to be noted as a means of establishing a parity in this business between the two countries.

In certain lines involving the use of lime the enterprise of American manufacturers is indicated by the money they are expending in educating the public to the value and the use of lime. This particularly applies in the agricultural field, where lime is beginning to be used in large amounts on the soil. It may be noted in passing that at least three-fourths of the tillable land in the eastern half of the United States needs lime to bring out its best productive capacity and afford a suitable foundation for building up the soil by other means. The general adoption of the practice of liming the land has an important bearing upon the productiveness of American farms, and to those acquainted with the situation it will suggest the large educational problem which is presented to induce farmers to adopt this practice. A number of the more aggressive lime producers on the American side have been spending large sums of money in educational work in supplying lime and in carrying on demonstration work for the use of lime on American farms. They should be protected in the potential business which they are thus developing against the import of cheap and low grade materials from the Canadian side, which may be employed as substitutes. This applies particularly to the use of raw pulverized limestone, which within certain limits may be substituted for the burnt product. Whatever substitution of this kind may be economically practicable should be reserved for American producers, and the States' manufacturer should be protected against the encroachment on their business by foreign manufacturers who are not in any way contributing to the expensive educational process of inducing States' farmers to use lime.

In the construction and chemical fields involving the use of lime heed should be given to the trends in the development and methods of foreign producers, who, by reason of advantages they have acquired, may be expected to adopt the same aggressive methods toward business in the eastern half of the country that will be described more in details as applied to Western States. The difference in labor costs and other conditions affecting such trade competition are not as pronounced in the eastern half of the continent as on the west coast, but they should be recognized on their merits.

THE NORTHWESTERN SITUATION.

Much the larger part of the imports of lime from Canada have come in through the Pacific coast customs districts. Canadian lime plants on the Pacific coast are located on the open water adjacent to Puget Sound and have direct access to ocean transport. A strong and aggressive company has developed there in the last half dozen years. A second plant has recently been established, and it is reported that still a third plant on the Canadian side is about to be established. Those Canadian manufacturers have been aggressively usurping the business of the producers in the States in that region.

The imports of lime into the Washington and San Francisco customs districts are shown in Table V, and the percentage they bear to the total imports of lime from Canada.

TABLE V.

	Imports into Washington district.	Percentage of total imports.	Imports into San Francisco district.
	Tons.		*Tons.*
1914	1,711	71.8	(1)
1915	786	29.2	(1)
1916	3,176	68.9	315
1917	4,131	52.5	380
1918	3,428	48.0	1,627

[1] Not itemized.

These amounts and percentage become more impressive when it is considered that the production of lime in the State of Washington has decreased from approximately 85,000 tons in 1910 to 15,570 tons in 1918, and a less amount (figures not at hand) in 1920, showing that the imports have continually been a larger factor in the production in that district. This shrinkage in tonnage in that State has been far greater than in the country as a whole, which has only reduced about 14 per cent between 1910 and 1919. This indicates the inroads which the imports have been making into the lime business in the Washington district.

A number of factors enter into this competition which the Canadian manufacturers have been enable to wage:

1. *Labor.*—The States' manufacturers contend, and the claim is conceded by the Canadian manufacturers, that the latter extensively use Chinese labor in the production of lime and the materials for its package, while American manufacturers employ only American labor. Lime manufacturers in the Washington district report that the wages of these Chinese laborers are from 40 to 60 per cent less than the wages paid to the laborers in the lime industry in the State of Washington.

2. *Shipping facilities.*—The Canadian manufacturers have enjoyed special advantages in shipping facilities. American manufacturers, especially for shipments within the Unted States, even though by water, have been obliged to use American bottoms, manned by American labor, the charges for which are very much above the cost of similar service in foreign bottoms, especially tramp steamers. The Canadian manufacturer has been permitted to make use of these cheap foreign facilities for access to States' markets. The protection which the United States Government has seen fit to give to American shipping facilities is a recognition of this phase of competition. There being no corresponding demand for lime on the Canadian side in that region where American manufacturers might use the same cheap foreign bottoms, they are thereby without any adequate means of retaliation.

3. *Fuel and cooperage material.*—The Canadian manufacturer has had access to the cheaper because less developed sources of timber for fuel and cooperage, which has given him a definite advantage in the business—which advantage has been worked over and fairly well settled in the lumber and shingle business in that part of the country, by giving the American manufacturer a degree of protection.

4. *States' lime consumers do not benefit.*—There would be more justification for admitting this cheaper Canadian lime if the States' consumers benefited thereby. To understand this statement it must be remembered that the lime business from the manufacturer is done through the dealer. The Canadian manufacturer has made his drive on the States' dealer and has undersold the Washington State manufacturer. The dealer has merely switched his source of supply and, as these are established agencies not easily developed, he has pushed the Canadian product, and thereby kept the States' product away from the trade, at the same time selling at practically the same price to the consumer that might otherwise be charged.

Further, questionable practice in closely copying, without exactly duplicating, States' brands and trade-marks has given their product the appearance of greater acceptability to the consumer in the States. It is also said that while

prices were dropped in the earlier stages in sapping the States' market, that later when the States' manufacturers were crippled they were put back very close to what the price would be from States' manufacturers.

5. *Inroads on by-products.*—Every quarry has a certain amount of spalls not suitable for burning in the kiln. These are sold in various ways as by-products, and their income contributes to balance up the business and give a margin of profit. The same advantages which have enabled the Canadian manufacturers in that district to invade the burnt-lime market have enabled them to invade the market for this spall or small stone, thereby further injuring the lime producers in the States.

6. *Finally, the exchange rate.*—Back of all the above-stated factors, and in addition to them, there stands the substantial barrier of the difference in exchange rate on money between Canada and the States. At the present date this is 16 per cent. That is to say, an American dollar is worth 16 per cent more on the Canadian side than in the States, and its effect runs through the price of labor and materials on the Canadian side and through the price of the product on the American side. This is perhaps a variable factor, which may be expected to improve in the course of years.

DUTIES PROPOSED.

In proposing a modification on tariff duties on imports of lime products, it is recognized that the needs are not uniform, even throughout the length of the Canadian border. The Washington situation represents the extreme condition. The National Lime Association, after carefully studying the situation, proposes the following maximum duties to meet the needs of the Northwestern manufacturer:

1. On quicklime in cooperage, a duty of 50 cents per 100 pounds.
2. On quicklime in bulk, 30 cents per 100 pounds.
3. On hydrated lime, 40 cents per 100 pounds.
4. On limestone (pulverized), $1 per ton of 2,000 pounds in bulk, $1.50 per ton in bags.

The method of arriving at these figures may be briefly explained as follows:

The difference in labor cost on 100 pounds of lime, in cooperage, including both the lime and the package, is approximately	$0.15
Difference in shipping cost	.05
Difference in exchange	.165
Protection against dumping (explanation, by which a foreign manufacturer frequently feels justified in disregarding certain overhead charges)	.135
Total	.50

On bulk lime the labor factor and the value involved in exchange due to the lower value, together with less overhead expense, permits the reduction to 30 cents.

Hydrate does not involve cooperage and is less valuable per ton, which permits a reduction in the tariff rate on account of labor and exchange, which will reduce the rate of the proposed figure to 40 cents.

One dollar per ton on ground limestone presupposes that it will be moved in bulk, so that the labor, exchange, and overhead charges establish this figure as a minimum of protection—$1.50 per ton, in bags.

In view of the fact that the exchange rate may change rather rapidly, we would propose to your honorable committee that the duties might be readjusted once each year on a fixed date, based upon the change in the exchange rate. Accepting the 50-cent duty on lime in package on the basis of 15 cents exchange rate, that duty could be reduced to 35 cents when the exchange rate was at par and correspondingly increased should the difference become greater.

We respectfully urge your committee to grant these measures of protection to the lime industry of the United States.

BRIEF OF THE ACME CEMENT PLASTER CO., ST. LOUIS, MO.

THE LIME AND LIMESTONE INDUSTRY.

The lime and limestone industry of Puget Sound, already bled white by the destructive effects of the war, is now threatened by complete ruin. It can be saved only by prompt and adequate protection by Congress.

This result has been accomplished by the most unjust and discriminatory industrial, commercial, and tariff conditions.

This is one of our basic and most important industries. Its various plants have contributed largely to the building of Seattle and of all other cities of the Pacific Northwest and of this coast. It represents millions of invested capital and a generation of effort and labor. Its product is of the highest quality for all purposes and is unsurpassed in the entire world. Plants had been developed sufficient to meet every domestic need under the most active building conditions and any growth in future demand had been nearly provided for. Prior to the war a promising export trade had developed which was of value both to the producers themselves and to the entire country.

Under these conditions there has not been, there is not now, and there could not be any need whatever for any importation of limestone or of its products to supply any market whatever on Puget Sound, in the Pacific Northwest, or in the United States anywhere.

For several years, however, our markets have been overrun by lime and limestone from British Columbia, Canada, often at a slaughter of prices and under circumstances of the grossest injustice to our own people and to all our industrial and commercial interests.

LABOR.

For many years this industry has been mined and operated in British Columbia either exclusively or largely by Chinese and Hindu labor at a scale of wages from 25 per cent to 50 per cent lower than the American standard at the same time in the same industry. This applied to all departments of production, including the quarrying of the stone, the burning of the lime, the preparation of the fuel, the making of the barrels, and to all other work about their plant. That class of labor was not available for the American producers and public sentiment would have precluded its use even if it had been available.

DISCRIMINATION OF IMPORT DUTIES.

Under our present revenue law raw limestone is admitted absolutely free of duty, while manufactured lime pays an import duty of only 5 per cent ad valorem. This schedule was adopted over the futile objections and protest of our producers, who foresaw its serious menace to them because of the great difference in costs due to their cheaper labor.

This law opened wide the door of our markets to the products of that cheaper labor and they promptly entered it.

At about the same time our present law was enacted a Canadian tariff law was also passed for the express purpose of closing the doors of their markets against all possible competition from the United States. It successfully accomplished its intended object.

Under their law our producers, paying the American rate of wages, are met at the boundary by an import duty into British Columbia of 15 per cent to 30 per cent on raw limestone, of 17½ per cent on manufactured lime, and of 17½ per cent on the value of the package containing same. Even these rates may be increased at any time by a simple ex parte "Order in Council," and that action has been threatened if it were found that the present rates did not exclude competition.

Made legally impregnable at home against any retaliation, they had already waged a most disastrous warfare upon our markets when the great World War came on.

EFFECTS OF THE WAR.

The immediate effect of the war upon our home producers was the prompt elimination of all of their export trade by the commandeering and demoralization of shipping and the abnormal increase in freight rates. The same conditions also eliminated them from the domestic markets of California and Hawaii.

In all their home markets building operations were reduced to the minimum and there has been but the slightest revival in that home demand up to the present time.

As a result, since the beginning of the war the quarries and the lime plants of Puget Sound and throughout the entire Northwest have been standing from 60 per cent to 80 per cent inoperative and are to-day at least 80 per cent idle. In some of the important plants the output dropped to 10 per cent of their prewar production.

The tremendous increase in cost of transportation, of labor, of fuel, of powder, of steel, of barrels, and of all other manufacturing supplies affecting the cost of reproduction is a matter of common knowledge. Scarcity and inefficiency of labor after the best men had gone to war, financial burdens, increase in taxes of every kind, abnormal overhead expenses, and many other things still further contributed to their extraordinary unit cost. Some of these same conditions also increased the relative advantage of the foreign producers in their onslaught upon American markets, for there were as many Chinese laborers in British Columbia during and since the war as there were before it began.

In short, our lime and limestone industry was an absolute victim of the war and enjoyed no offsetting benefits arising therefrom. This occurred after it had been tied hand and foot by the most inequitable tariff law which was ever enacted. Unable to retaliate, unable to raise a hand in defense without still further losses, it was obliged to witness the looting of the depleted remnant of its previously prosperous home markets, by and entirely in the interests of foreign production and against our own.

WAR TAX.

Since the beginning of the war Canada has levied a war tax of 7½ per cent on all such importations, plus a war tax of 2½ per cent on all freight thereon. This in effect adds just that much additional protection to their producers.

DIFFERENCE IN EXCHANGE.

At present the rate of exchange against Canadian money is 15 per cent. At times it has been more than that. This gives a double advantage to their producers and against ours. The proceeds of sales of American lime or limestone in British Columbia, when brought back to our banks, would show a shrinkage of 15 per cent on the gross selling price in Canada.

This represents a still further protection of 15 per cent to their producers in their home markets and against ours.

On the other hand their sales in American markets are either made in Canadian exchange which represents a cut to dealers of 15 per cent in price to influence orders in their favor, or when sales are made in American money it is promptly converted into Canadian exchange at a profit of 15 per cent to them on the gross sale price of their goods in our markets. That Canadian exchange is paid to their Chinese labor and adds just that much advantage to their already lower costs, in their still further invasion and slaughter of American markets.

Our import duty of 5 per cent on the manufactured lime only is figured upon its export valuation in British Columbia which is considerably lower than the present market price at which they sell it here. This export valuation is in Canadian exchange, therefore, they lose on 5 per cent in duty on the lower export valuation in Canadian exchange and gain 15 per cent in exchange on the higher gross selling price of their lime. On limestone, which comes in free, they gain the entire 15 per cent in exchange.

FREIGHTING ADVANTAGES.

A large part of these Canadian importations have reached our markets in British and other foreign bottoms and they are still being imported in such foreign bottoms. It is well known that such ships operating under foreign laws are able to deliver their cargoes in our coastwise markets from British Columbia quarries and kilns at a much lower cost of freighting than American bottoms, operating under our more liberal American shipping laws, can deliver their American cargoes in the same coastwise markets from American quarries and kilns.

While the United States is making the most extreme effort to build and support an American merchant marine to handle its commerce, its tariff law is thus, without cause or excuse, delivering its home markets for lime and limestone to foreign producers and to foreign shipping and is even wantonly sacrificing its own industries and its own people in order to accomplish that iniquitous end.

OTHER INEQUALITIES.

Prior to the passage of the two tariff laws above mentioned no Canadian lime whatsoever was exported to the markets of our Pacific coast, Hawaii, or Alaska. Their small plants were content to supply the small markets of British Columbia and were

not disturbed in doing so. But advantage was soon taken of the opportunity offered by our law. Be it remembered that the first to take the advantage was a company now owned by eastern American capitalists operating a Canadian plant through a Canadian corporation, and they are claiming some special consideration and some special right to slaughter American producers with a Canadian weapon because they are American. They deserve the greater condemnation. Made absolutely secure by Canadian law in their home markets of British Columbia and hiding behind a literal Chinese wall of protection they have assaulted their American neighbors across the line by dumping their surplus product in American markets regardless of the injustice to our producers. Still not satisfied and still further to increase their volume of tonnage, to reduce their unit cost and still regardless of consequences to their American neighbors and with their purpose of American invasion openly declared, they largely increased their productive capacity, built sawmills and barrel factory at their British Columbia plant, thus providing themselves with cheap fuel and cheap barrels produced by cheap labor. By exporting their lime to the United States in these cheap duty-free barrels they have been injuring both the cooperage industry and the lime industry of the United States.

Through all these advantages their plant has been operated to capacity while American plants have largely stood idle. Through these advantages and methods they have increased their American trade until they are now dumping more than three-fifths of their entire output upon the American market. Since the beginning of the war the American consumption has not increased. It has very enormously decreased. Therefore, the entire trade which they have managed to appropriate in the United States has been literally and bodily taken by displacing just that much American product in its already war-depleted markets. By running to capacity at the expense of the American producer they are able to still further reduce their cost of production by spreading their overhead expense over the larger volume.

Other Canadian companies have also forced their way into our American markets. A wealthy company at Victoria, British Columbia, has been exporting large quantities of its lime to Puget Sound and Oregon markets.

Another Canadian company has overrun the northern part of Montana with its product, while a fourth one has been endeavoring to invade the Spokane markets by the quotation of very low prices.

Approximately 60,000 barrels of Canadian lime have been exported to San Francisco during the past year in addition to the large quantity exported to the Northwest, to Hawaii, and to Alaska.

It is evident that a determined effort on the part of Canadian producers is being made to completely overwhelm and absorb our local and Pacific coast markets to the destruction of our home producers by exploiting their advantages in cost under the shelter of a most harmful and unsuitable United States law.

They sell only to American dealers. No benefit whatever has accrued to consumers or the general public. The only beneficiaries are the foreign producers and their American dealers.

If these unfair conditions be permitted to continue not only will our producers of lime and limestone be driven to commercial ruin, but incalculable injury will be inflicted upon our consumers and ultimately upon the public, as destruction of any domestic industry must necessarily leave the consumer at the mercy of foreign producers.

It is manifest that the American lime and limestone producers are entitled to prompt and adequate relief at the hands of Congress and that under the conditions above recited Congress should exercise its power to justly protect our producers in our home markets as fully as Canada is protecting her producers in their home markets. This can only be done by the enactment of a law fixing such rates of import duty upon lime, limestone, and hydrated lime as will fully equal and overcome all the advantages possessed by foreign producers who now sell or who may seek to sell the same commodities in American markets. Manifestly the Canadian rates would be inadequate. To deny them such protection would represent a denial of the commonest principles of justice.

VITAL IMPORTANCE OF THE INDUSTRY.

As herein indicated, by far the largest and most profitable field of its operation is represented in the arts of peace. There is, however, a more serious aspect which forced itself upon our country's attention during the late war in regard to many factors whose vital importance had theretofore been largely overlooked.

It is absolutely essential in time of war.

While the quantities required for war purposes are comparatively small it should not be forgotten that not a pound of iron or steel can be made without it. No steel ships could be built and no engines installed. No blast furnace nor smelter could operate without it. Not a pound of paper could be made, not a pound of sugar could be made, many of the most important chemicals could not be made, and the whole field of agriculture and horticulture would lose one of its most essential supports.

These are but a few of the lines in which our country might be utterly helpless or desperately embarrassed if forced to depend upon a foreign supply in case of war.

Therefore the vital necessity of fully protecting this industry both in peace and in war.

This does not represent the encouragement and coddling of an infant industry whose importance and whose future might be problematical, but the salvation of an old industry, important in both peace and war, from being further offered up as a free-will sacrifice upon the altar of foreign selfishness and greed.

GYPSUM.

[Paragraph 74.]

E. G. WEST, REPRESENTING THE SOUTHERN GYPSUM CO., NORTH HOLSTON, VA.

Mr. WEST. Mr. Chairman and gentlemen, I shall not detain you long.

Mr. HAWLEY. What paragraph are you interested in? Do you know the number of the paragraph?

Mr. GARNER. Paragraph 74.

Mr. WEST. I have not been at the executive offices, gentlemen, for about two months. I expected to meet some other gentlemen here to-day, but I have not had that pleasure, so I come before you with very limited information; but, as I fear that it will be some time before this bill is drawn and presented for the consideration of the Congress, I would like to say that we will be glad to furnish you such figures and data and information, and we promise you to get it in in due time so that it will be of use in connection with the gypsum industry of this country.

I have a little brief here, gentlemen, that I have drawn up, and with your permission I will read it:

The mine and mill of the Southern Gypsum Co. (Inc.) is located in the mountains in the western portion of Virginia. The company's investment approximates $500,000, and was made in 1906, and a consideration of first importance, which led to the investment, was the favorable tariff then existing, which gave reason to believe that the gypsum requirements of eastern Virginia and the coastal plains of the Carolinas could be supplied from the Virginia gypsum fields.

The total capacity of our plant for all the gypsum products produced is 500 tons a day, but the average daily output for an entire year has seldom exceeded one-half of this figure.

Products shipped are: Wall plaster, finishing plasters, land plaster or agricultural gypsum, crude gypsum for cement mills, and plaster board.

Land plaster or agricultural gypsum is a sulphur fertilizer, and is particularly valuable for legumes, which includes peanuts, alfalfa, clover, peas, and beans.

The Southern Gypsum Co. (Inc.) is constantly in competition with gypsum imported from Nova Scotia and milled at various points along the Atlantic coast. It feels this competition most keenly through importations of crude gypsum at Norfolk, where it is ground into land plaster and shipped to all of the more important points where this material is used. The amount of gypsum imported at Norfolk for this purpose often amounts to 25,000 tons a year.

The gypsum in Novia Scotia is quarried at low cost along the coast and is delivered to American ports by cheap barge haul. A single tug will bring several barges to Norfolk from Nova Scotia in a week. On the other hand, the gypsum in Virginia is mined by expensive methods, with roof problems and water to

contend with. The average freight rate into the regions where most of the agricultural gypsum is used, from the Virginia mills, is $3.50, while the rate from Norfolk to this territory averages $1.50. With the restrictions on ocean traffic, imposed by the war, removed, and with freight rates as high as they now stand from Virginia producing points, it is very doubtful whether the Virginia gypsum mills can compete with the imported mineral which is milled at Norfolk. In a similar manner, the Virginia gypsum mills feel the competition of gypsum shipped to New York and vicinity and calcined for wall plaster there and distributed by cheap water haul to all the Atlantic seaports, notably Norfolk, Charleston, Brunswick, Savannah, and Jacksonville. If the principle of protection to American industries against foreign competition that permits of deliveries at American ports of low-priced commodities is the principle guiding your decisions, the need of a substantial duty on crude gypsum deserves your consideration. If additional revenue is desired, a duty of 50 cents a ton would give a substantial return to the Federal Treasury and would, at the same time, give some protection to the gypsum industry in the United States and to Virginia in particular.

Mr. GARNER. What is the duty now?

Mr. WEST. It is very light.

Mr. GARNER. What is the amount of consumption of this product in the United States?

Mr. WEST. Something over 2,000,000 tons.

Mr. GARNER. How much is produced in this country?

Mr. WEST. The 2,000,000 tons I mentioned is the amount produced in this country.

Mr. OLDFIELD. What is it worth per ton?

Mr. WEST. Agricultural gypsum at the mine is worth at present about $6 per ton. For wall plaster, where it is calcined and treated and more expense enters into it, the present mill price is about $11 per ton.

Mr. GARNER. The agricultural product sells for about $6 per ton?

Mr. WEST. That is, the bulk. That does not include the package. That is bulk.

Mr. GARNER. You suggest a duty of 50 cents a ton on it?

Mr. WEST. Yes. We think that it could stand that. There used to be, gentlemen, if you will pardon me, a duty of 50 cents a ton years ago.

Mr. GARNER. That is a little less than 10 per cent.

Mr. OLDFIELD. In 1909 it was $3.50 per ton.

Mr. HADLEY. You say in your brief we have to give you some protection. Do you mean that we ought to put you on a competitive basis?

Mr. WEST. We think we can get along with that, gentlemen.

Mr. HADLEY. Do you mean 50 cents per ton?

Mr. WEST. Per ton.

Mr. HADLEY. That, under your statement, is less than 10 per cent ad valorem. It would seem like that would satisfy Mr. Oldfield, and would give you the protection desired by Mr. Fordney.

The CHAIRMAN. It is 10 per cent under the present law. Under the Payne law plaster rock, or gypsum, crude, ground, or calcined, was 26 per cent, now 10 per cent, and for paper, 20 per cent ad valorem under the Payne law. That is 20 per cent. The other was 30 cents per ton, $1.75. But the ad valorem rates I give you, 25, 26, and 20 per cent, all of them are 10 per cent under the present law.

Mr. OLDFIELD. On page 27 of this same act it is $3.50 per ton.

Mr. WEST. Pardon me. Is that $3.50 per ton on the crude gypsum rock that you mentioned?

Mr. HAWLEY. No; that is Keene's cement. What is calcined gypsum used for?

Mr. WEST. It is used for plaster.

Mr. BACHARACH. That is what you are asking protection on now?

Mr. WEST. That is the crude rock. The crude rock does not sell at $6, gentlemen. The crude rock that we sell just as it is mined and cracked to be ground, is selling at present for $4.50 per ton. I mentioned agricultural gypsum, where it is very finely ground, gentlemen, so that it will be readily soluble. Ninety-five per cent of it will pass through a 100-mesh sieve, for instance.

Mr. BACHARACH. The information I have before me is that the importation of gypsum is less than 1 per cent.

Mr. WEST. How far back does that date, may I ask?

Mr. BACHARACH. This is 1918; 1917 is the last total that I have, but it gives as a general proposition the imports of gypsum and plaster of Paris being valued at less than 1 per cent of the production, therefore it may be considered negligible.

Mr. WEST. That is true, gentlemen. During the war very little came in. As you know, ocean freights were badly hampered. But previous to that time, and very likely subsequent, when ocean freights were more plentiful, there may be a large importation.

JOSEPH C. SEGUINE, REPRESENTING GYPSUM IMPORTERS, NEW YORK CITY.

Mr. SEGUINE. Mr. Chairman, I represent the importers of gypsum in their entirety, and in submitting our arguments for gypsum to be put on the free list the argument presented will be more in general, owing to the fact that we are not posted as to the specific requirements of the committee.

Mr. TREADWAY. What was that last sentence, please?

Mr. SEGUINE. Our arguments will be more in general, owing to the fact that we are not posted as to the specific requirements of the committee, not being familiar with the information which might be required on special points.

We desire to call your attention to paragraph 74 of the tariff customs act of 1913 and to request that this paragraph be changed so as to admit raw (uncalcined) gypsum free of duty. The reasons for recommending that raw gypsum be placed on the free list have been set forth in a communication dated December 30, 1920, and addressed to the United States Tariff Commission, and now in their possession. For your information, a copy of that communication is attached to this statement and made a part thereof.

You will note that in addition to the reasons for the recommendation that raw gypsum be admitted without duty it gives a brief history of the industry, the source of imports, and other matter which, together with the information already compiled by the Tariff Commission, should furnish you with adequate data upon which to act in regard to our request.

In considering the subject of gypsum importations this fact should be kept constantly in mind: All the raw gypsum imported into the United States comes from Canada and is therefore not subject to the

low production costs due to small wages paid to labor in other foreign countries.

We suggest that the phraseology of paragraph 74 of the tariff customs act of 1913 be changed by the omission of the first, second, third, fifth, sixth, seventh words and the comma appearing after the eighth word and by changing the position of the word "calcined" from eighth place to first place in the sentence. With these changes made, the paragraph would read as follows:

74. Calcined gypsum, pearl hardening for paper makers' use; white, non-staining Portland cement, or other cement of which gypsum is the component material of chief value, and all other cements not specifically provided for in this section, 10 per centum ad valorem.

Mr. GARNER. May I ask you a question? What is the consumption of raw gypsum in this country?

Mr. SEGUINE. The importation of raw gypsum into this country to-day averages about 300,000 tons.

Mr. GARNER. That is the amount of imports; what is the consumption?

Mr. SEGUINE. The consumption of gypsum in the United States is between two and three million tons.

Mr. GARNER. Between two and three million tons. About 10 per cent of the consumption is imported?

Mr. SEGUINE. About 10 per cent of the consumption is imported; yes, sir.

Mr. GARNER. And that pays a duty to-day of how much?

Mr. SEGUINE. Ten per cent ad valorem.

Mr. GARNER. Ten per cent ad valorem, and you want it put on the free list?

Mr. SEGUINE. Yes, sir.

Mr. GARNER. And why shouldn't we have some revenue from gypsum?

Mr. SEGUINE. That will, I think, be explained as I go a little further along with my remarks.

We would also suggest that a new paragraph be introduced in the free list to be worded as follows:

Plaster rock or gypsum, crude, ground.

These are the arguments we desire to place before you concerning the importation of raw gypsum and gypsum products.

No raw gypsum is imported into the United States from any country except Canada, and only from the maritime Provinces of that country, so that this review of the history of importations from Nova Scotia and New Brunswick covers the whole field of raw gypsum importations.

Raw gypsum has been imported from the Maritime Provinces of Nova Scotia and New Brunswick, Canada, to the Atlantic seaboard of the United States for a period of over 100 years. In the beginning raw gypsum was imported from these Provinces in small schooners of 100 to 125 tons and ground for use as fertilizer. Later on importations were made for the use of several small mills in New York and one in Newark, N. J., in the manufacture of plaster of Paris.

Importations of raw gypsum prior to 1870 amounted to only a few thousand tons per annum. After 1890 the use of raw gypsum rapidly increased, due to the discovery that plaster of Paris could be used in

the base coats of wall plaster by the addition of dry retarder. Thus an increased demand for raw gypsum both from Nova Scotia and from the local deposits throughout the United States was developed.

The demand was further increased by the establishment of Portland cement mills in this country after 1890, Portland cement requiring about 4 per cent of raw gypsum in its manufacture. The development of the gypsum wall plaster trade, the manufacture of plaster boards, gypsum fireproof tile for partitions, gypsum floors, and gypsum roofs further added to the demand.

As a result, the number of manufacturing plants in the United States consuming domestic raw gypsum was increased to meet the larger demand, and a rapid development of the industry followed. This development was reflected in the increased importation of raw gypsum from Canada, but in a small proportion to the total of raw gypsum now mined in the United States.

Wood pulp is not used in the manufacture of plaster board or plaster block. Pulpboard is a wood product and contains no plaster.

As has been the case from the beginning, practically all of the quarrying of raw gypsum in Nova Scotia and New Brunswick—as will be seen in the appended list of the quarries and plants operated there—and, to a large extent, its ocean transportation to the United States, is carried on with American capital, the resultant importation being for the purpose of obtaining a supply of raw gypsum for manufacturing plants in New York City and vicinity owned by the same operators.

Only three sources of supply of raw gypsum from mills east of the Allegheny Mountains are available. These are Virginia, northwestern New York State, and the Maritime Provinces. This fact emphasizes the necessity of preserving for consumers of the Atlantic seaboard the ability to secure products manufactured from raw gypsum imported from Nova Scotia and at as low a price as possible.

It must not be overlooked that the weight of the commodity emphasizes the desirability of a relatively local supply of the raw material from the standpoint of economy in handling.

Mr. GARNER. In other words, you want to use up the raw gypsum in Nova Scotia and save what we have in Virginia and New York for future uses?

Mr. SEGUINE. That is not the purpose.

Mr. GARNER. I understood you to say that you wanted to conserve; and to conserve means to keep.

Mr. SEGUINE. No; I did not refer to that. I had reference to the American capital invested in these Canadian quarries, and that the transportation means should be conserved; that is, the interest should be conserved——

Mr. HADLEY (interposing). What interests? I do not understand you.

Mr. SEGUINE. The interest invested—American interests.

Mr. HADLEY. Invested in Canada, in Canadian enterprises?

Mr. SEGUINE. The American capital invested in Canada.

Mr. HADLEY. You are here to make a plea for American capital invested abroad rather than that which is invested at home?

Mr. SEGUINE. We are trying to show where the supply is that is east of the Allegheny Mountains. The supply east of the Allegheny

Mountains is confined to Virginia and western New York State and Nova Scotia.

Mr. HADLEY. You are making a plea for American capital invested in Nova Scotia; you are making a demand for protection of Nova Scotia industries.

Mr. SEGUINE. On the ground that the capital invested in Nova Scotia is American capital.

The CHAIRMAN. Mr. Seguine, if it is necessary to close up our institutions, you would recommend that that be done?

Mr. SEGUINE. That would not be necessary. [Reading:]

Consideration should be given to the fact that in the process of calcination which takes place in the United States there is a loss of 16 per cent in the weight of the raw gypsum on which the importer pays freight and duty.

The Atlantic seaboard manufacturers who have invested their capital in Nova Scotia quarries for generations back are logically and economically dependent upon the same deposits by reason of their geographical availability by direct deep-sea transportation. A similar situation exists at Tacoma, Wash., the mills in that city obtaining their raw gypsum from Alaska.

The following quarries are operated in the Maritime Provinces of New Brunswick and Nova Scotia by American capital for the furnishing of raw gypsum to American mills:

Newport Plaster, Mining & Manufacturing Co. (Ltd.), Avondale, Nova Scotia, J. B. King & Co., New York.

Wentworth Gypsum Co. (Ltd.), Wentworth, Nova Scotia, J. B. King & Co., New York.

Hillsborough Plaster Quarrying & Manufacturing Co. (Ltd.), Hillsborough, New Brunswick, J. B. King & Co., New York.

Rock Plaster Corporation, Walton, Nova Scotia, Rock Plaster Corporation, New York.

Newark Plaster Co., McKinnon Harbor, Nova Scotia, Newark Plaster Co., Newark, N. J.

Albert Manufacturing Co., Hillsborough, New Brunswick, Newark Plaster Co., Newark, N. J., interests and others.

Windsor Gypsum Co. (Ltd.), Newport Station, Nova Scotia, Higginson Manufacturing Co., Newburgh, N. Y.

Shipments from these quarries constitute practically all of the raw gypsum imported into the United States.

The following quarries are operated by Canadian capital for Canadian use only:

Windsor Plaster Co. (Ltd.), Windsor, Nova Scotia.

Iona Gypsum Co. (Ltd.), Iona, Cape Breton, Nova Scotia.

Ontario Gypsum Co. (Ltd.), Caledonia and Carson, Ontario.

Manitoba Gypsum Co. (Ltd.), Winnipeg, Manitoba.

MANUFACTURING PLANTS OPERATING IN CANADA.

Small mill at Windsor, Nova Scotia, operating but one kettle for a local market.

Iona Gypsum Co. (Ltd.), at Brador Lakes, Cape Breton, Nova Scotia, a two-kettle plant, shipping its product locally and to points on the St. Lawrence River.

Albert Manufacturing Co., Hillsborough, New Brunswick, affiliated with the Newark Plaster Co., Newark, N. J., United States. A four-kettle plant, which ships plaster of Paris in barrels to a limited extent to points on the Atlantic seaboard, the major portion of its output being for Canadian consumption.

Ontario Gypsum Co. (Ltd.), Caledonia, Ontario. It supplies raw gypsum largely to Canadian cement plants. It also supplies calcined gypsum for the manufacture of gypsum blocks to the Ebsary Gypsum Co. (an American-owned corporation) for Canadian consumption only.

Manitoba Gypsum Co. (Ltd.), Winnipeg. Output distributed in Canada.

None of the foregoing plants (data on Manitoba Gypsum Co. lacking) manufacture plaster board or plaster block, and their location would preclude successful competition in the United States markets.

PRICES.

The price of plaster of Paris in New York City in 1919 was $17 per ton of 2,000 pounds. In 1920 the price was $19 per ton. The increase in price was due to increased cost of labor, fuel, and to ocean freights.

REASONS WHY RAW GYPSUM SHOULD BE ADMITTED FREE OF DUTY.

We respectfully submit that the present tariff on the importation of raw gypsum should be removed and that this class of this commodity should be placed on the free list, because:

The territory at and adjacent to the Atlantic seaboard should have the full benefit of its relative nearness to the Nova Scotia quarries.

Nova Scotia and New Brunswick afford one of the three possible sources of supply of raw gypsum for manufacturing plants east of the Allegheny Mountains.

All the manufacturing plants located on the Atlantic seacoast are those at or in the vicinity of New York City. These plants are solely dependent upon the Canadian source of supply for their raw gypsum.

American capital developed and still owns the Canadian source of supply of raw gypsum.

American capital developed and still owns the American mills in which the raw gypsum is manufactured.

Two-thirds of the raw gypsum imported is carried by a fleet of boats used exclusively for this purpose and owned and operated by American capital.

The American capital invested in the Canadian quarries, the transportation system, and the manufacturing plants in the United States should be protected by being given the advantage of a lowered cost of raw gypsum.

Sixteen per cent of the weight of the raw gypsum (upon which duty and freight are now paid) is lost in the process of manufacture.

Free raw gypsum would not work a hardship upon users of domestic raw gypsum, because (*a*) of ocean freights from source of supply to manufacturing plants; (*b*) distribution from producing points is economically controlled by rail freight rates to consumers.

SUPPLEMENTAL BRIEF OF SOUTHERN GYPSUM CO. (INC.), NORTH HOLSTON, VA.

Mr. Ralph W. Stone of the United States Geological Survey for mineral resources in the United States 1919, part 2, pages 99–113, gives the following figures for gypsum mined in the United States from 1913 to 1919:

	Short tons.		Short tons.
1913	2,599,508	1917	2,696,226
1914	2,476,465	1918	2,057,015
1915	2,447,611	1919	2,420,163
1916	2,757,730		

The same authority presents the following for gypsum imported into the United States from 1913 to 1919:

	Unground	Ground or calcined.		Unground.	Ground or calcined.
	Short tons.	*Short tons.*		*Short tons.*	*Short tons.*
1913	447,383	4,542	1917	240,269	16,538
1914	369,214	3,559	1918	50,653	6,117
1915	336,856	5,749	1919	171,733	10,415
1916	254,131	11,706			

The figures for 1913 may be regarded as normal figures and the probabilities are that when figures for 1920 are compiled the gypsum mined in the United States and the gypsum imported for the year will be about the same as in 1913. In other words, imports amount to about 20 per cent of the total tonnage mined in America. This imported gypsum makes itself felt along the Atlantic coastal line and it presents

strong and difficult competition for mills using American mineral, which were built to serve the Atlantic States.

In the brief presented to you by Mr. West it was stated that, "if the principle of protection to American industries against foreign competition that permits of deliveries at American ports of low-priced commodities is the principle guiding your decision, the need of a substantial duty on crude gypsum deserves your consideration. If additional revenue is desired, a duty of 50 cents a ton would give a substantial return to the Federal Treasury and would at the same time give some protection to the gypsum industry in the United States, and to Virginia in particular."

This statement was very conservative, particularly in view of the fact set out in the brief, that the freight rate to the coastal country from the Virginia mills is from two to three dollars a ton higher than from Norfolk and other points where the imported mineral is milled and distributed.

Maximum revenue would probably be secured by duty of a dollar a ton. A duty of this amount would probably not restrict imports more than twenty-five to fifty thousand tons and would consequently give a revenue of $400,000 a year. This slight restriction of imported mineral would be of some help to the industry in the United States and particularly to the mills in Virginia.

PUMICE STONE.

[Paragraph 75.]

ROBERT LAUGHLIN, REPRESENTING BRAND & STEVENS, PASADENA, CALIF.

Mr. LAUGHLIN. I represent, Mr. Chairman, Brand & Stevens, of Pasadena, Calif. I am at present residing in the East, and have been for about four years. I have been trying to get this tariff for the last four years, Mr. Chairman.

Paragraph 75 we would like to have amended, pumice stone, unmanufactured, wholly or partially manufactured, manufactures of pumice stone, or of which pumice stone is the component material of chief value, 1 cent a pound.

In 1919, when we first undertook to ask for this, I represented mining interests of California, Oregon, Nevada, and Arizona. Today there are only two of those mines left and still trying to keep open. One is in northern and one in southern California, and those two mines are in charge only of a watchman, or of several watchmen. Business is entirely stopped, because they can not compete with foreign stone under the present tariff. We have a freight rate across the continent of something over $20. It has been recently raised again. The Italian stone, which is our principal competitor, is able to land and pay the duty, or has been, at least, on the Atlantic seaboard, where the big consumption is used, for less than our transcontinental freight rate alone, and for that reason we can not compete and can not operate without a higher protection than we have been having since 1913.

Mr. GARNER. You say the Italian stone can be delivered on the Atlantic coast cheaper than the freight on the same stone from California to the Atlantic coast?

Mr. LAUGHLIN. The ad valorem rate of any manufactured stone, from the statistics furnished by the Government, averages, from 1910, approximately $7.70 to $10.94.

Mr. RAINEY. Is that the tariff?

Mr. LAUGHLIN. No; that is the ad valorem at which the pumice stone was brought in.

Mr. RAINEY. The tariff?

Mr. LAUGHLIN. Yes.

Mr. GARNER. You don't give me the information I made inquiry about. You gave me the cost per ton based upon the ad valorem now levied on the Italian stone, but you did not give me the cost of the stone when it was purchased in Italy and the freight on it from Italy to the Atlantic seaboard. I would like to know whether the original cost of the stone, plus the freight, plus duty, is more or less than the freight rate from the Pacific coast to the Atlantic seaboard. That is the first statement you made.

Mr. LAUGHLIN. The cost of the stone in Italy I can not give you accurately, because as far as we have been able to find out the stone is all landed f. o. b. Atlantic seaboard, duty paid.

Mr. GARNER. Have you any of those quotations?

Mr. LAUGHLIN. I have the entire matter comprised in this brief which I have presented to the committee, and if permissible I would like to put this in the record for future reference. I have already submitted one of these pamphlets to each member of the committee.

Mr. HULL. Is there any difference in the quality of our western product and the imported product?

Mr. LAUGHLIN. Some of the imported ones we have not yet developed any market. On others, the lower and cheaper grades. The higher-grade stone, such as sells readily as high as 25 to 50 cents a lump, if we have produced any, at least we have not marketed any like that. It has not been found in quantity sufficient to produce.

Mr. DICKINSON. Do you want the same or a different tariff according to the grade?

Mr. LAUGHLIN. We would like a tariff of 1 cent a pound.

Mr. DICKINSON. On all kinds?

Mr. LAUGHLIN. On all kinds. Some of the Italian stone will continue to come in.

Mr. GARNER. In other words, the rate of duty that you suggest will probably give you an opportunity to develop the cheaper and lower grade of stone, while the higher grade of stone will continue to come in regardless of how high we place them?

Mr. LAUGHLIN. Not only the high grade, but some of the manufactured and partially manufactured stone will come in.

Mr. GARNER. What is your product used for?

Mr. LAUGHLIN. It is used as an abrasive, largely, in the metal industry; cleaning metals, polishing work. As an example, we are told that during the war it was used to a great extent for polishing shells, to make them true and accurate in rifles. Whether that is so or not, I don't know. We have not been able to verify it.

Mr. DICKINSON. You want it 1 cent a pound?

Mr. LAUGHLIN. One cent a pound.

Mr. DICKINSON. It is now a quarter of a cent?

Mr. LAUGHLIN. A quarter of a cent. And, as has been outlined in our brief, to answer the question asked a minute ago, I think you will find our statistics largely based on Government data, both from the Tariff Board and from the Bureau of Statistics.

Mr. TILSON. You claim an equal quality, equal efficiency, in use of the American pumice stone and Italian?

Mr. LAUGHLIN. On some of the grades we do and on some of the grades we do not. Under the present conditions, the Italian stone

is a little lighter, clearer than ours. Ours is gray, and the Italian is white, and even if we could put them on the market at the same price, the Italian will be given the preference by reason of precedence.

Mr. TILSON. I have a statement here from a manufacturer which says:

During the past two years, due to circumstances, we were compelled to use a domestic product mined in California and ground in the Eastern States. Our experience was that the domestic product was less than 50 per cent as efficient as Italian pumice stone, and while we believe in a protective tariff we feel that the question of increasing or applying a tariff on Italian pumice stone in the interests of the California product should be considered carefully.

Mr. LAUGHLIN. If I may have time to answer that question a little in detail, we submitted a letter to the men we considered most competent to answer this very point that you brought up, and in doing that we selected four industries that we thought, from our experience, represented probably 90 per cent of the pumice-stone consumption. They were the dye and chemical industry, the furniture industry, the automobile industry, and the metal cleaners' industry. That went to men that we did not know, except through reputation, as being what we considered competent to answer it. We addressed practically the same letter to all of them:

DEAR SIR: You are probably aware of the fact that certain interests whom the writer represents are making efforts to secure a protective tariff for American pumice stone. This tariff will probably be opposed by three American firms who are at present importing about 90 per cent of the foreign stone brought into America.

From what we have learned, at least one of their arguments will probably be based on the ground that the American stone is not as good as the imported. This argument, you know, is of the same general nature as the one about the comparison between American and German dyes, and, in fact, between every American product which has received encouragement for growth as a result of the war.

You can, of course, understand our anxiety, not alone to successfully anticipate this objection, but to learn for our own information the actual opinions of those whom we consider experts in the different fields in which pumice stone is used. We are, therefore, writing to inquire if you will give us your frank opinion as to the relative merits of Italian and American pumice stone in both the lump and ground form. It is naturally understood that any expression which you may care to make will be considered as your individual opinion and not as an official opinion of your company.

Trusting to receive an early reply, and assuring you of our appreciation for any statement which you may care to make, whether it is favorable or unfavorable, we remain.

Now, Mr. Chairman and gentlemen, we received replies from three of the four. The furniture man that we wrote to did not answer us. We sent a follow-up letter and got no reply to that. It is taking quite a lot of the committee's time, but we have incorporated three replies in this brief, and if I may refer to those for the record, those answers will all be in there.

The CHAIRMAN. What is the substance of those replies, without reading them?

Mr. LAUGHLIN. The sum and substance was that the American stone was a little bit better, but off-color, and as a general thing it was about 50-50. Some of them favored one and some the other. Some of them could not tell the difference.

BRIEF OF BRAND & STEVENS AND W. A. T. AGARD, SAN FRANCISCO, CALIF.

[At the suggestion of various Senators and Congressmen this pamphlet on pumice stone has been prepared at the direction of American pumice-stone producers. Its object is to furnish ready reference and to facilitate the consideration of those intersted in the pending Federal legislation on this commodity.]

In coming before the Congress of the United States with a petition praying for a protective tariff on pumice stone, we are acting with the belief that American commerce, agriculture, and industry are inherently entitled to such governmental supervision and regulation as will furnish them with a fair chance of successful domestic competition with similar activities of foreign nations.

With the possible exception of certain vital industries essental to the Republic in case of war, we feel that American business is justified only in attempting to secure for its divers interests such protective legislation as will enable it to enjoy equality in industrial competition, and that such legislation should be regulated so as not to secure to any individual or group of individuals either a definite or a potential monopoly. In the following pages we will attempt to briefly define the condition of the pumice-stone industry of the United States and to respectfully set forth our arguments in favor of the bill (H. R. 11280) introduced by Mr. Kettner in the House of Representatives December 17, 1919:

"75. Pumice stone, unmanufactured; wholly or partially manufactured; manufactures of pumice stone, or of which pumice stone is the component material of chief value, 1 cent per pound."

PUMICE STONE (OCCURRENCE AND DISTRIBUTION).

Pumice stone occurs in nature in the form of a vesicular, silicious volcanic rock having the general appearance of a white or gray petrified sponge or as a finely disseminated powder sometimes called pumicite or volcanic ash.

The occurrence of both types is attributable to volcanoes or to volcanic activity. In the case of the former, or massy stone, certain silicious rocks with the proper proportion of fluxes are, by the action of internal terrestrial heat, fused to form a natural glass called obsidian. This glass while in the molten state and confined within the volcanic vent or crater is expanded to form a semivesicular froth by the action of gases and vapors escaping through it from the earth's interior. Upon cooling it congeals and solidifies into the commercial lump pumice stone, photographs of which appear on first page.

Mr. Erwin H. Barbour, in volume 4, part 27, of Nebraska Geological Survey, explains in a very graphic manner the formation of both pumice stone and pumicite, as follows:

Vulcanism.—The discussion of vulcanism may not seem germane to this subject, but a better understanding of our pumicite beds is dependent on a general knowledge of volcanoes and certain principles of vulcanicity. Knowledge of this subject is now widely diffused through physical geographies and current literature. However, for those having no books at hand treating of vulcanism, a few facts pertaining to volcanoes and volcanic products may be of general interest.

A volcano is a vent in the earth's crust through which rock, melted rock, and gases are ejected. Often there is built up about such vents a mountain of lava, or cinder, which may attain a height of several thousand feet. They are self-made mountains. Cracks or great fissures in the crust are naturally the vents for pent-up, molten rocks. When cracks or fissures cross, the intersections are the likeliest spots for vents.

In popular parlance, volcanoes are "burning mountains," for seeming tongue-like flames and flashes of light are to be seen. This effect of fire and flame is but the reflection of molten lava upon the clouds of steam and dust. As the red-hot lava rolls and boils it gives intermittent flashes of light on the great clouds of steam rolling up from the crater. These simulate the flashes of the lighthouse; accordingly, such a volcano as Stromboli, which can be seen long distances on the Mediterranean, and which is in nearly continuous activity, is fittingly termed "lighthouse of the sea."

There are two main types of volcanoes, namely, the quiet and the explosive, but all start on level ground, and the crater is a secondary matter. The quietly eruptive type builds cones so broad that they do not seem high. This is largely because their lavas are basic, that is, contain liberal amounts of iron, lime, and like metals. Hence they melt easily, are thin, and flow readily down low

gradients. It should be noted that in such cases the heat is relatively high but the steam discharge low. Our best example of the quiet type of volcano is the great northwestern or Columbian lava field, which covers much of the northwestern quarter of the United States. Here about 200,000 square miles are deeply covered with successive lava flows. Thin lavas welled up through great vents and poured over the territory from Wyoming to the Pacific coast. This titanic work was accomplished silently, perhaps, or at most with little noise or commotion. The moderately and the violently explosive types build high craters, because the lavas are thick, viscous, and thrown out as ragged chunks. The viscosity is due largely to the fact that such lavas are acidic—that is, they contain liberal amounts of quartz, feldspar, and other acid minerals. Acidic rocks melt with difficulty; the resulting lavas are thick and flow sluggishly; cool and set quickly. Acidic lavas are viscous, and gases escape with difficulty, hence oftentimes with explosive violence. The heat is relatively low, but the discharge of steam may be very high.

Upon the surface rocks melt with difficulty and at high temperatures. This is called dry fusion. If far below the surface, therefore under high pressure, and in the presence of water, they melt with one-third the difficulty. This is termed hydrothermal fusion. Thus, under favoring conditions, infusible material may be readily fused and become plastic or liquid. A weak spot in the crust liberates this pent-up material, and a volcano results.

The products of a volcano are gases, molten rock called lava, and rock fragments. Gases, largely steam, are discharged in incomprehensible amounts, the column or cloud rising several miles in the air, where it is chilled, condensed, and precipitated as rain accompanied by destructive tornadic winds and terrifying lightning. Large amounts of hot lava, volcanic dust, and pebbles are borne upward by the blast. The volcanic thunderstorm washes torrents of hot cinders and dust into ravines and valleys, burrying everything. Streams of hot mud are dreaded even more than the tongues of flowing lava. The hot mud, when turned to rock, is called tuff. So great is the amount of steam that many vulconologists have assumed that there is some direct subterranean connection between volcanoes and ocean waters. Others contend that it is steam liberated for the first time from its interior prison. Large quantities of rock and lava, fragments of all sizes, from dust to great chunks, are in many cases hurled high into the air. On falling they pile up around the vent more or less assorted. The courser particles drop closest, the medium sized beyond, while the finest are carried great distances. In this type the volcano is apt to be steep, conical, and shapely. The violently explosive eruptions are counted the most terrifying phenomena in nature. It is from this class of volcanoes that our pumicite was derived.

Lavas may pour over a crater's rim or through some breach in its side. According to its thinness or thickness and upon the gradient depends the rate of flow, which on steep slopes approximates that of running water 3 to 6 miles an hour, growing sluggish as the streams cool. Deep-seated lavas are under high pressure, and the contained gases can not expand. On coming to the surface, where the pressure is relieved, they become inflated with bubbles, constituting that spongy volcanic product called scoria.

Pumice is a closely related product, although much lighter in color and weight and finer in texture. Pumice is called volcanic froth. It is a natural glass filled with bubbles and tubes so fine that good block pumice on fresh fracture often has a satiny luster. Being under high tension, due to the internal pressure of confined gases, the glassy rocks are often riven into minute particles. This constitutes very fine volcanic dust, which is carried long distances to settle over the country in beds of flour-like powder. Such was the origin of the beds in Nebraska.

From the above it will be seen that both pumice stone and pumicite can be expected to occur in enormous quantities and to be distributed widely throughout the world. In the United States deposits are described in the States of—

Washington: Mount Baker, Mount St. Helens, etc.

Oregon: Crater Lake, Mount Union, Klamath Indian Reservation, etc.

California: Mount Shasta, Mount Lassen, Mono Valley, and Imperial County.

Nevada: Soda Lakes, and slightly east of the Funeral Range. Also near Las Vegas.

Arizona: Near San Francisco Mountain, and in the Chocolate Range.

Idaho: In the Sawtooth Mountains, and in the Tetons.

Utah: Near the Ice Spring Buttes.

New Mexico: Southwest of Mount Taylor.

Colorado: In the district of the Spanish Peaks near the New Mexico line.

Nebraska: The Nebraska geological survey reports commercial beds of pumicite in Oklahoma, in Kansas, and in practically every county in Nebraska. They also report this same formation as extending into western Iowa. It is also reported in the southwestern part of South Dakota, as well as through the adjacent district of Montana.

Alaska: Traveling north, along the Pacific coast, pumice is reported at different points along the Alaskan mainland until large deposits are reached on and in the neighborhood of the Alaskan Peninsula. Skishaldin, Pogromnoi, Vesevidof, and Katumi will furnish examples in point; while the island of Kodiak, Uganik, and Afognak all contain pumicite deposits of recent origin. (See National Geographic Magazine, vol. 24, 1913.)

Hawaiian Islands: In the Hawaiian Islands the deposits of Manua Loa are too familiar to require description.

In the Philippine Islands, Mayon Volcano is reported to be composed largely of cinders, pumicite, and pumice stone. This formation seems to be the same as that of Fusi Yama of Japan.

Mexico, Central America, and the Pacific report over 50 more or less distinct formations of this description, of which may be mentioned as prominent Santa Catalina and Tres Virgenes, of lower California; Colima and Chacahua, on the west coast; Xinantecatl and Popocatepetl, in the interior; and Mount Pelee, on the island of Martinque.

In Europe the principal supplies of pumice have, from early times, been secured from Italy and her neighboring possessions, Sicily and the Lipari Islands. According to Barbour (previous citation), "it is worthy of notice that pozzuolana was a material used in famous Roman walls, aqueducts, and historic buildings, and that the Pantheon, built of it about 2,000 years ago, stands up without a crack. This remarkable cement was made of volcanic dust (i. e., pumicite) found around Vesuvius, especially of that found near the town of Pozzuoli, which gave the name of pozzuolana to this cement."

Italy has been able to enjoy a practical monopoly in both the European and American markets for pumice stone, because of the favorable situation of large deposits of this material in the Lipari Islands just north of the coast of Sicily. The isolated situation of these islands has rendered them desirable for a penal colony, and convict labor is advantageously used in the mining and preparation of this commodity for export. (See F. E. Stevens's letter to Congressman Kettner, Oct. 27, 1919.) These extremely low labor charges, when coupled with the fact that the product can be loaded directly into steamers, has given Italian stone the tremendous advantage of combined cheap labor and cheap water freight rates. They have, therefore, been able to deliver this stone at a profit not only in the European market, but on our own Atlantic seaboard, and at a cost of less per ton than our transcontinental freight rate.

Uses.—Both pumice stone and pumicite are classified as natural abrasives. The material is divided into three main groups, which are respectively:

(1) Lump.

(2) Grinding stone.

(3) Natural pumicite—or volcanic ash, which occurs in the form of a very fine powder.

Each of these groups is in turn divided into a number of subheadings.

Lump stone.—Italian importers grade this stone according to its size and physical characteristics. These gradings, according to the latest information furnished us, are nine in number, and each different grade has a particular field of utility. Among the consumers of lump stone might be mentioned: Furniture manufacturers, piano manufacturers, metal platers, metal spinners, metal finishers, art metal workers, coach and automobile manufacturers, car manufacturers, manufacturers of musical instruments and phonographs, the manufacturers of highly-finished steel specialists, such as surgical instruments, cutlery, etc.

A certain percentage of lump pumice stone also finds a use as a toilet article for removing cuticle, stains, etc.

Grinding stone.—A large portion of the imported stone is ground before marketing. The particular grades recognized are four in number, known respectively as F, FF, FFF, and FFFF. This grinding is effected by passing small lumps known as "pezzame" through a specially designed mill and then screening, or "bolting" the ground product through a silk cloth known as bolting silk. The grades thus prepared are marketed to a trade similar to that listed under lump stone, but this trade furnishes a larger field through the de-

mands of dentists, the manufacturers of tooth powders and pastes, and of other polishing and cleaning compounds.

Pumicite or volcanic ash.—The uses of this ingredient have been so well set forth in the Nebraska Geological Survey, volume 4, part 27, page 388, et seq., that we are again tempted to quote Mr. Barbour:

"Although the uses of pumicite are now many and varied the main ones are abrasion, construction, nonconduction, and scouring. It is important in the arts as an abrasive, like pumice, for finishing and polishing wood, painted and varnished surfaces, glass, stone, and metal. For the past four or five years it has been substituted extensively for imported pumice. It has been used in stove works, plate-glass works, and allied industries. One of its most important uses is for scouring compound, manufactured and sold under divers trade names. It forms the base of Old Dutch Cleanser, a scouring compound of merit, manufactured on a large scale by the Cudahy Co., of Omaha. Pumicite soaps are very desirable in the home, stores, factories, surgical and dental laboratories, and in institutional buildings. It is reported that the Armour, Swift, Colgate, and other large companies are using Nebraska pumicite extensively. It is said that many companies which formerly used silt and like materials are making increasing use of our native pumice.

"It is common experience in daily work of all kind, especially in running the automobile, that one's hands become stained, soiled, and greasy. Ordinary soaps often prove inadequate. Those sufficiently strong to be efficient are apt to be injurious to the skin. The various pumicite soaps work speedily and effectively and without injury even to a delicate skin.

"By virtue of its fineness and innumerable air spaces pumicite is a good nonconductor of heat and sound and has been used in lagging boilers and as packing for water pipes, steam pipes, and the like. Appreciable amounts are already demanded for constructional work. In the dam across the Niobrara River, at Valentine, Mr. C. H. Cornell had 50 per cent of pumicite used in the Portland cement mixture, and it is claimed that an important reduction in cost was effected. Because of its fineness, pumicite may prove useful in filling the minute voids in concrete mixtures. Some years ago the writer had students try a number of experiments on a variety of cement mixtures, some of the tests proving very satisfactory and promising. Mixtures high in pumicite seemed low in strength. Liberal samples were sent East and were converted into brick by the sand-lime process. The resulting brick were perfect in form, close and even in texture, of fair strength, and capable of a wide range of pleasing tints. A hope has long been entertained that by experimentation methods may be devised for the semifusion of pumicite, either by direct heat or perhaps by an electric current, so that it can be molded into certain porous wares, particularly pipes for subirrigation. The fine texture would exclude rootlets, but its minute porosity would permit the slow escape of water to the root bed. Under one patent pumicite is fused sufficiently to mold into certain forms of hollow tile and slabs for building purposes, and a future may await this product. All experimentation looking toward the utilization of pumicite for constructional purposes is to be encouraged and commended.

"Of late considerable amounts have been shipped to certain firms having waste vegetable oils, especially cottonseed oil. These waste products are thereby readily converted into merchantable articles. The relation of manufacturing processes to Nebraska pumicite is not at first apparent. For instance, the relation of whip factories and shoe-string factories to our pumicite resources seems remote. However, it is reported that certain of these factories use large amounts of our pumicite. It appears that in the process of carding and spinning quantities of cotton seed remain, from which oil is extracted. The oil is then saponified and mixed with Nebraska pumicite and thus converted into one of the best of our modern hand soaps.

"Sanitary methods have popularized dustless sweeping compounds for use in commercial, educational, and public institutions. These compounds consist essentially of fine sawdust soaked with paraffin oil. By the addition of some salt the compound is rendered hygroscopic, or moist, to facilitate the laying of dust. To give it the necessary body or weight that it may lie close to the floor under the floor brush sand is added. Pumicite has been effectively substituted for sand in some sweeping compounds.

"One of the most unique and unexpected uses is that of a condition powder for stock. It is said that the acute, glassy particles act destructively upon intestinal parasitic worms. However this may be, large amounts of this preparation are reported to have been compounded and sold by an Omaha firm.

"Pumicite, like diatomite, has been used in making dynamite. It has been mixed with linseed oil and used for paint and as an adulterant for paint. It is predicted that the coarser varieties, being well adapted for the purpose, will be used on freshly painted surfaces where sanding is specified.

"It is also adaptable for use in the process of wall-paper printing. It is used as an adulterant to add weight to soaps."

Physical properties.—The appearance of lump pumice stone has previously been described. Chemically both pumice stone and pumicite might be termed complex aluminum silicates. A comparative analysis derived from divers sources appears below. A microscopic examination of the ground stone is probably only of technical interest, but for the sake of ready reference microscopic slides of imported stone, domestic stone, and domestic pumicite are included. The slides of imported stone and pumicite are taken from the Geological Survey reference above given. The slides of the California stone are taken from work done in the laboratory of the Commercial Electrolytic Corporation for Brand & Stevens.

Chemical analysis of pumice stone and pumicite.

Locality.	Silica (SiO_2).	Alumina (Al_2O_3).	Iron oxide (Fe_2O_3)	Lime (CaO).	Magnesia (MgO).	Sodium oxide (Na_2O).	Potassium oxide (K_2O).	Water and volatile matter.	Total.	Authority.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	
Pumice:										
Nebraska	73.84	13.62	1.38	0.94	0.26	6.22		3.74	100.00	University of Nebraska.
Oklahoma	72.18	14.5		0.54	0.00	4.429	(?)	5.05	(?)	F. Aurin.
Montana	68.49	21.35		0.00	0.39	3.487	4.169	2.12	99.986	E. Barbour.
Italy	73.70	12.27	2.13	0.65	0.29	4.25	0.73	1.22	99.82	Mitchell.
Pumice stone:										
California	73.91	13.30	2.46	0.54	0.37	3.03	4.18	1.01	99.40	"CECO" Laboratories.
Nevada	74.21	13.14	2.28	0.61	0.28	4.13	3.81	1.59	100.05	"CECO" Laboratories.

Normal prewar conditions of the industry.—On page 209, part 2, of the Mineral Resources of the United States, 1916, Mr. Frank J. Katz, speaking of this industry, states:

"The domestic product is almost wholly a finely comminuted material not properly called pumice, which is volcanic dust or 'ash,' composed of minute fragments of pumiceous, glassy lava. The imported material, which comes from the Lipari Islands, a volcanic group north of Sicily in the Mediterranean Sea, is a massive, very finely pumiceous or vesicular rock. Very little pumice of this type has been produced in the United States."

The statistics given represent pumice used for abrasive purposes solely. The pumice used for construction—and it is known that some of the domestic article has been so used—is not included. The material has come from several counties in six States—Inyo, Imperial, and Siskiyou Counties in California; Harper, Morton, and Phillips Counties in Kansas; Furnas, Lincoln, and Harlan Counties in Nebraska; Custer County in South Dakota; Cassia and Power Counties in Idaho; and Millard County in Utah. Available deposits are very widespread and are particularly abundant in all the Great Plains States from South Dakota to Texas.

The Nebraska Geological Survey has recently published an excellent description of the Nebraska occurrences with a discussion of the origin, distribution, and mining of pumice dust deposits, and the characteristics and uses of the material.

The marketed production of pumice in the United States in 1916 amounted to 33,320 short tons, valued at $82,263, an increase of 5,612 tons, or about 20 per cent in quantity, and of $19,078, or about 30 per cent, in value, as compared with 1915. In 1916 California produced a small amount; the Kansas production increased very largely and exceeded that from Nebraska, which for a number of years had been the leading State.

Pumice produced and sold in the United States, 1910–1916.

Year.	Quantity (short tons).	Value.	Price per ton.
1910	23,271	$94,943	$4.08
1911	21,689	88,399	4.08
1912	27,116	86,657	3.19
1913	24,563	55,408	2.26
1914	27,591	59,172	2.14
1915	27,708	63,185	2.28
1916	33,320	82,263	2.47

IMPORTS.

Value of pumice imported for consumption in the United States 1911–1916.

1911	$118,977	1914	$92,668
1912	74,478	1915	65,691
1913	93,408	1916	116,543

This summary while entirely adequate to cover the field for which it is intended, is incomplete because it gives no information as to the tonnage represented under "Imports." In order to correct this deficiency, we secured from the United States Tariff Commission a report on the imports of pumice stone. This report is submitted by Mr. John F. Bethune, and appears in toto on page 1, et seq., of the Appendix. From this report of the Tariff Commission we can reconstruct the table of imports given in the United States Geological Survey above quoted, carrying our figures through the fiscal year of 1918.

Year.	Quantity (short tons).	Value.	Value per ton.
1911	+9,702	$103,293	$10.62
1912	+9,086	94,807	10.43
1913	+7,480	74,122	9.90
1914	10,305	95,644	9.28
1915	9,066	74,736	8.24
1916	11,458	114,442	9.98
1917	11,103	153,228	13.80
1918	5,519	72,753	13.18

It will be noticed that the figures furnished by the Tariff Commission do not tally with those of the Geological Survey. As both of these authorities are the highest available we are at a loss to account for this discrepancy, and are unable to turn to any more authentic source for a final statement. The theory might be advanced that the Geological Survey's records include all imported stone whether it entered duty free or not, while the Tariff Commission's records are based only on stone paying a duty. An objection to this theory would be that in some years the Tariff Commission's figures showed higher values. This seems to justify the inference that certain grades of stone are being imported under a double classification, and that this classification is at times subject to different interpretation by the Tariff Commission and by the Geological Survey.

Considered economically, a very definite distinction should be made between pumice stone and pumicite. As Mr. Katz has pointed out (see p. 18), American production has been almost entirely confined to pumicite, while practically all pumice stone has been imported.

Enormous beds of pumicite centrally located (see p. 13) have enabled the mine owners to produce a large tonnage at a low cost, so that the average price per ton for this material has not been over $2.50 since 1913 (see p. 18, also p. 243, Statistical Abstract of U. S., 1918).

This low cost of production, and the large consuming field, has caused the establishment of permanent and well-founded industries engaged in the manufacturing and marketing of commodities in which pumicite forms the base. The illustration on the opposite page will perhaps furnish an adequate example. We are not in any way familiar with the detail of the pumicite producers'

economic problems, and will, therefore, from here on attempt to confine ourselves only to the matter of lump pumice stone and to the arguments we wish to advance as American producers in favor of the before-mentioned bill, H. R. 11280.

In its natural state, lump pumice stone is usually found mixed with unmarketable minerals which comprise at times over 95 per cent of the deposits. (See method of formation, p. 4 et seq.) An estimate made by one producer which is considered fair is that between 80 and 85 per cent of the material mined is, for one reason or another, rejected. The economical recovery of the desirable 10 or 15 per cent requires a thoroughly modern equipment, including not only power shovels, but complete mills and machinery such as are shown in the accompanying photographs.

With this equipment, the operation of a small camp, having a daily output of approximately 15 tons, would be about as follows:

A power shovel is first used for removing the cumbersome overburden, and then for excavating the crude stone which, with the gangue, is loaded into dump wagons. For this operation one "power shovel engineer," one "assistant," two "teamsters," two "muckers," and three "shovel men" are required. The teamsters haul their loads to the mill, where it is dumped and shoveled into hoppers by them, which conveyors transport it to revolving screens. Two "shovel men," one "conveyor man," and one "screen man" are employed in this work. The stone in passing through the screens and classifiers is separated from the loose material which comprises a large part of the gangue. One "oiler" is kept busy attending to the numerous moving parts.

From the classifier the stone passes onto the grading belt, where six "graders" select that proportion which is marketable. The rejected portion passes to the dump, where one "teamster" and one "shovel man" distribute it. Two "sackers" and one "sack sewer" collect and prepare the selected lump for shipment.

Two "truck drivers" with assistants transport the sacked stone to the railroad and load it onto cars. A bookkeeper maintains a general supervision over these operations.

A tabulated list of a pay roll per day based on the above operations will be about as follows:

One power-shovel engineer	$12.00	Two sackers, at $4.50	$9.00
One assistant	6.00	One sack sewer	4.50
Three teamsters, at $4.50	13.50	Two truck drivers, at $6	12.00
Two muckers, at $4.50	9.00	Two truck drivers, at $4.50	9.00
Six shovel men, at $4.50	27.00	One bookkeeper	5.00
One conveyor man	4.50		
One screen man	4.50		147.50
One oiler	4.50		
Six graders, at $4.50	27.00		

While the above figures are considered accurate and conservative, it should be pointed out that the large fluctuations in the labor market and in the general cost of living produce almost continuous changes in the estimated figures of a pay roll. This calculation, while accurate at the time it was made, may have subsequently been subjected to fluctuations which would render it now only approximate.

The pumice-stone producer has numerous other expenses besides the actual pay roll. According to the sworn statements of two producers (the reproduction of which appears on pp. 4 and 5 of the Appendix), the average cost of American pumice stone delivered at the market is $39.94½.

It will be noticed that in both the above-cited statements the producer has charged 20 per cent gross profits; he has, however, added nothing for overhead or for the amortization of his mine.

Italian stone is imported almost exclusively into America by three firms: James H. Rhodes & Co., Chicago and New York; R. J. Waddell & Co., New York; and T. Van Amringe & Son, New York. These three firms are the only ones equipped with mills for grinding pumice in appreciable quantities, and consequently they enjoy the advantage of being able to retain practically the entire American market.

In round figures the American pumice market consumes about one-tenth of the amount of lump to that of ground or powdered pumice. The Italian stone, according to the figures of importers, is bought by them, duty paid, in New

York at $12 per ton. (See statement of F. E. Stevens to Congressman Kettner.) The cost per ton for manufacturing this stone into powdered form is as follows:

Rent	$1.00
Silk	.70
Barrels	2.45
Power	1.00
General manufacturing cost	5.00
Total manufacturing cost	10.15
Cost of raw material	12.00
Total gross cost	22.15

This is equivalent to 1.1 cents a pound.

The estimated cost of $12 for the raw imported stone coincides very closely with the figures of the Tariff Commission. (See pp. 1, 2, and 3, Appendix.) In 1917 the Tariff Commission's figures averaged $13.80 a ton and in 1918, $13.18. The average, however, included the stone brought in as "manufactured and partially manufactured," which would tend to bring this average proportionately higher than the average for the unmanufactured lump.

Arguments against an increased tariff on pumice stone will, we believe, be advanced only by the three importing firms listed on page 23 and by Italian interests alarmed at a possible curtailment of their exports. The American pumice-stone mine owners have made a sincere and protracted effort to secure all possible information as to the form these objections will take.

As far as we know, the American importers' arguments against an increased tariff will be founded upon four principal points.

(1) That an increase in tariff will give to a small number of American operators practical monopoly of the pumice-stone market, and that the jobbers, manufacturers, and distributors will be at their mercy.

Answer.—The enormous deposits of this material listed on pages 13–14 preclude the possibility of any small group of men gaining control of the natural undeveloped resources. The small tariff asked for places the American stone only on a fair competitive base with the imported. Any attempt by the American mine owners to profiteer through exorbitant prices would be doomed to failure on account of the resumption of cheaper foreign imports.

(2) An increased duty will proportionately increase the costs of the ultimate consumer, thus bringing about a further advance in the price of one of the staple commodities at a time when the efforts of the Nation are being directed to a reduction in prices and to a general retrenchment.

Answer.—It has been seen above that the American manufacturer produces ground or powdered pumice at a cost of 1.1 cents per pound. His carrying and selling charges have to be added to this. This stone was sold prior to the war, or at the time when the manufacturing charges referred to were secured, at from 3½ to 5 cents per pound in wholesale lots and from 7 to 10 cents per pound in small lots. The latest market quotation, taken from the March 22, 1920, issue of the Oil, Paint, and Drug Reporter, is:

Pumice stone:	Cents per pound.
Original packages	5 @ 6
Selected lump, in barrels	7 @ 10
Powdered, pure, pound	5 @ 8

We submit this as evidence that the ultimate consumer has not enjoyed and does not enjoy any advantage from the importation of Italian stone produced by convict labor, and that the figures show the importer is receiving considerable over 200 per cent gross profit.

(3) A higher tariff will greatly curtail, if not eliminate, imports of Italian stone, and this would mean a large loss in revenue to the Government.

Answer.—By consulting the tariff tables in the appendix it will be seen that a large amount of imported stone comes in under the heading of "Manufactured or partially manufactured." This manufactured stone, together with certain grades of Italian stone not duplicated in America, will undoubtedly continue to be imported as formerly.

From the fiscal year 1914 to 1918, inclusive, the United States received $17,975 duty from unmanufactured stone and $79,072 from manufactured or partially manufactured, an average of about $3,595 and $15,814, respectively.

The manufactured or partially manufactured stone totaled, as far as available records show, 28,149,593 pounds, or an average of about 5,829,916 pounds per year. A duty on this of 1 cent per pound would have brought in, in round figures, $58,300 per annum.

The average freight rates from the Pacific coast mines, according to the sworn statements of producers (see Appendix, pp. 4 and 53, is slightly over $20 per ton. From an annual shipment of 5,000 tons, therefore, the Government would derive through the 3 per cent war tax about $3,000. [Since the above was written these freight rates have been increased 20 per cent.]

All of this stone, however, would not be hauled to the Atlantic seaboard, and in fairness an allowance should be made for some diversions to intermediate points such as Chicago and Detroit; $2,000, it is believed, therefore, would be an ultraconservative figure of the Federal revenue derived from this source, which, if added to the above import estimate, would give a total revenue of about $60,000 a year. Even if we accept the somewhat debatable question that importations of manufactured and partially manufactured stone will decline, as a result of an increased tariff, certainly a deduction of one-half the above total estimated revenue for this purpose, or $30,000, would be more than ample. This would still show a net gain of at least 50 per cent in the Federal revenue derived from this source.

(4) American pumice stone is not as good as the imported. During the war it was used as an inferior substitute, but now that Italian stone is coming in the trade will not buy the American.

Answer.—This is the same argument so frequently used to the disparagement of American products. In an effort to ascertain the actual opinion among the trade regarding the comparative merits of the domestic and foreign material, Brand & Stevens, who own and operate one of the California pumice deposits, addressed the following letter to a number of men whom they considered competent to advance an unbiased opinion. These men were associated respectively with the dye industry, the plating industry, the automobile industry, and the furniture industry. The four industries, either directly or through their associations, consume, it is believed, nearly the entirely bulk of both domestic and foreign pumice:

BUFFALO, N. Y., *March 19, 1920.*

DEAR SIR: You are probably aware of the fact that certain interests, whom the writer represents, are making efforts to secure a protective tariff for American pumice stone. This tariff will probably be opposed by three American firms, who are at present importing about 90 per cent of the foreign stone brought into America.

From what we have learned, at least one of their arguments will probably be based on the ground that the American stone is not as good as the imported. This argument, as you know, is of the same general nature as the one about the comparison between American and German dyes, and in fact between every American product which has received encouragement for growth as a result of the war.

You can, of course, understand our anxiety not alone to successfully anticipate this objection, but to learn for our own information the actual opinions of those whom we consider experts in the different fields in which pumice stone is used. We are, therefore, writing to inquire if you will give us your frank opinion as to the relative merits of Italian and American pumice stone in both the lump and ground form. It is, naturally, understood that any expression which you may care to make will be considered as your individual opinion, and not as an official opinion of your company.

Trusting to receive an early reply, and assuring you of our appreciation for any statement which you may care to make, whether it is favorable or unfavorable, we remain,

BRAND & STEVENS.

BUFFALO, N. Y., *March 25, 1920.*

GENTLEMEN: I note with pleasure the effort your concern is making to secure protection for the American pumice stone industry.

Undoubtedly you will be confronted by the opposition with the argument that the American grade of stone is inferior to the imported article. Such an argument I believe to be in error, as it has been my experience to find the American article the equivalent to the foreign product in every way for average purposes. I have noticed that the average American pumice stone sample is

slightly higher in price than the foreign article but its quality and purity are such as to warrant the additional cost.

The quality of this product, coupled with the principle of Americanism involved, certainly makes your stand a worthy one, and I join heartily in cooperating with you in your efforts to establish firmly the American industries of America.

ALBERT E. SAMPSON.

NEW YORK, N. Y., *March 22, 1920.*

DEAR SIR: As you know the business in which I am engaged brings me into contact with the largest metal working shops in the country. A great many of these use abrasives of various sorts, particularly the large plating shops. The only statements in reference to pumice which I have heard and which I would consider authoritative would seem to indicate that among users there is a preference for the American lumped stone and about an even break on the powdered stone.

I would not like to have this statement considered as coming from my company. It goes without saying that a careful investigation would have to be made before the Oakley Chemical Co. could go on record on a matter of this sort. But my own opinion, based on the expressions I have heard, is as above.

W. M. CAMPBELL, *Assistant Manager.*

PHILADELPHIA, PA., *June 8, 1920.*

GENTLEMEN: Replying to your valued favor of recent date, beg to inform you it is contrary to the Ford Motor Co.'s policy to make for publication comment on any article or commodity used in the manufacture of its product, and the writer wishes, therefore, to convey the idea that no official significance whatsoever is attached to the remarks following, since they are merely personal opinions gained through several years of practical experience in wood and metal automobile-body finishing.

There is no doubt in my mind that in preparing automobile work for painting and varnishing our better grades of American pumice stone offers the very best possible qualities necessary to high-grade work.

"Rubbing down" with pumice stone moistened with water a very adhesive and uniform surface is prepared for subsequent coats. A surface, in fact, which reduces the possibility of blistering and checking to the minimum, allowing the maximum durability, longer wearing qualities, and consequently greater satisfaction in general than is possible by any other method within the knowledge of the writer. Our domestic pumice stone is held in high favor among automobile manufacturers throughout the United States, especially is this true with the manufacturers of high-grade cars where a high finish and long-wearing color body is essential. Even the manufacturers of the less expensive cars are using the same method in preparing their work for succeeding color varnish, rubbing varnish, and finishing varnish coats with very excellent results; although in the latter case it stands to reason the amount of labor entailed is proportionately less.

A. A. FRENCH.

We regret to state that the letter to the furniture manufacturer was not answered, and we are, therefore, unable to submit either the favorable or adverse criticism of this industry.

Fortunately for us we have among our files the official opinion of the largest importing house in America, James H. Rhodes & Co., of Chicago and New York. This opinion is in the form of a letter addressed to the War Trade Board under date of June 21, 1918, by their president, Mr. E. R. Murphy, who was kind enough to furnish us with our copy. The original of this letter can no doubt be found among the War Trade Board's files:

WASHINGTON, D. C., *June 21, 1918.*

GENTLEMEN: I hereby confirm our conversation of this morning.

Effective May 13, the War Trade Board prohibited the importation of pumice from Italy.

In answer to letters sent out by the Research Bureau of the War Trade Board, I came to Washington and met Mr. Early McCoy on May 30. He had invited Mr. Katz of the Geological Survey to prove to us that the California lump pumice was equal in quality to the Italian and could be used.

A survey of the pumice of the American pumice field had been made by our own man and we filed with Mr. McCoy samples of the crude and finished California pumice, together with a statement that the California pumice as an abrasive is in every way equal to the Italian. The only thing against it being its yellow color as against the white of the Italian.

The fact was further developed that, although before the war California pumice could not be used in the eastern markets, with the high ocean freight rates of to-day the California lump pumice for grinding can be laid down in New York for about $36 a ton, while the Italian pumice will cost $52 per ton.

There are two distinct sources of supply operating to-day where the other grinders of pumice can supply their needs from California.

It was Mr. McCoy's opinion that he would recommend that the prohibition of pumice from Italy be made permanent.

May 31, I interviewed Mr. Alley, of the War Trade Board, who stated that no importations of pumice would be allowed. It was at that time, and after this conference in Washington, that we exercised our option to make a contract for 2,000 tons of pumice in California, and sent our vice president and one of our factory men to California, where we have erected a camp, purchased motor trucks, and committed ourselves to an obligation of about $20,000 for this season's business.

On June 6 the War Trade Board issued a supplementary ruling permitting pumice stone to come in from Italy as return cargo and if it would not delay the ship.

On June 3, Guiseppe Feriazzo, an Italian pumice broker, living in New York, suggested to us that we raise a fund of $2,000 and he would arrange for a shipment of 1,500 tons of pumice stone for New York from Italy.

We inquired how this could be done in view of the prohibition of the War Trade Board, but he seemed very sure of his ground, and said we did not have to pay the money unless he brought in the pumice.

It is our conclusion that Feriazzo works through the New York Chamber of Commerce, as he is very friendly with the secretary, who in turn brought pressure to bear upon the Italian ambassador, which resulted in the embargo being lifted on June 6.

To support the statement that Italian pumice is not required in America, we review these facts:

1. The main importers, who are Waddell & Co., of New York; Van Amringe & Co., of New York; James H. Rhodes & Co., of New York, are unanimous in stating that there is a four months' supply on hand.

2. The two cars which we ground of California lump pumice was distributed among the trade generally, and conceded to be as good, although because of its color the California pumice can not compete if the Italian is allowed to come in; it sells at 4 cents per pound, and nobody will experiment for so low a price.

3. All Italian pumice originates in the Lipari Islands, and must be shipped from Messina or Naples. The Shipping Board advises that 85 per cent of submarine losses are in the locality, and object to sending a boat south of Leghorn.

4. Pumice, being very bulky, is loaded in Italy at the rate of 200 tons per day. Estimating on 11,192 tons imported last year, this will take 56 days. In the already congested harbor of New York it can be unloaded at the rate of 300 tons per day, an additional 37 days. In other words, 93 days, or three months, consumed by bringing an unessential product to America.

The language of the order allowing pumice to be "shipped as return cargo, providing the boat is not delayed," is a sad temptation for the Italian shipper who gets 10 per cent drawback on the freight and the Italian shipping agent who, besides his brokerage, makes a profit on the marine insurance.

We have had a branch in Italy for 12 years, and I will venture to prophecy that under the language of this order pumice stone will be shipped to New York and it will never be reported that the ship was delayed. The delay will be attributed to other causes.

We handle 65 per cent of all the Italian pumice coming into this country, and were the first to cooperate heartily and adjust our source of supply to California. Upon the statement of the War Trade Board, we have invested $20,000, which will be a total loss if you allow this rule to stand. Furthermore, Italian pumice is not necessary, as the California goods are just as good in quality and a little cheaper.

We respectfully ask that the shipment of Italian pumice be prohibited from Italy.

JAMES H. RHODES & Co.
E. R. M., *President*.

The Italian Government, prompted by the efforts of individuals and corporations engaged in the mining and exportation of pumice stone, would be expected to offer objections to any increased duty on this commodity.

Their arguments would probably be based on—

(*a*) Balance of trade between the two countries.

(*b*) Italy's debt to the United States. (See Statistical Abstract of United States, 1918, p. 86.)

(*c*) Rate of exchange between Italy and the United States.

Balance of trade.—During the five years preceding the late European war, 1909 to 1913, inclusive, the United States exports to Italy exceeded the imports by an average of $13,095,400 yearly. Of this amount $507,400 represents the average annual value of foreign exports from the United States to Italy, making the average annual excess of our domestic exports $12,588,000.

During this same period Italy's average annual imports into the United States of commodities which were duty free were $17,659,382, while her average annual imports of dutiable goods were $30,866,000. (Reference, Statistical Abstract of United States, 1918, p. 886.)

Now, if we take the average annual imports of pumice stone into this country over the same period, we find it amounts to only $88,516, or less than two-tenths of 1 per cent of the total value of Italian imports. (Reference, table of pumice imports furnished by United States Customs, Treasury Department. See Appendix.)

The above figures are given covering the period between and including 1909 and 1913, because it is believed advisable to separate the European war period, when normal conditions were very much unstabilized.

Between 1914 and 1918, inclusive, the United States exports to Italy exceeded the imports by an average of $224,321,071 yearly. Of this amount $14,510,916 represents the average annual value of foreign exports from the United States to Italy, making the net excess of our domestic exports $222,369,612.

During this same period Italy's average annual imports into the United States of commodities which were duty free were $14,510,961, while the average annual imports of dutiable goods were $34,529,594. This shows that in spite of the enormous demands made upon all her resources as a result of the war Italy was able to increase her average annual imports of dutiable goods into the United States by over three and a half million dollars. (Reference, Statistical Abstract, United States, prev. cit.)

The average annual imports of pumice into the United States over the same period is $100,160, or about two-tenths of 1 per cent of the total value of Italian imports. (See Appendix.) While this fraction of a per cent is relatively so small as to be negligible, it is more than probable that a duty of 1 cent per pound would not seriously curtail the importations of any but the cheaper grades of pumice. The trade recognizes numerous grades of this commodity, only two of which have been successfully produced here in America. Some of these grades were sold to American importers for as much as 9 cents per pound, and this was retailed at prices up to 50 cents per pound, depending upon quantity and quality. The lack of production of these grades by domestic properties will cause the American consumer to continue to look abroad for his further supplies.

Italy's debt to United States.—On page 636, table 369, Statistical Abstract, United States, 1918, Italy's debt to the United States is given as $1,385,000,000. The interest on this, is we assume a rate of 4 per cent, amounts to $55,400,000 annually. The declared value of all crude pumice imported into the United States during the last 10 years averages a little less than $54,000 per year. Even if we were to assume that these imports were all profit to the producers, and that the entire amount was applied to above-mentioned interest, it would take the entire receipts of this pumice-stone commerce for a period of over 1,000 years to pay one year's interest on the Italian loan. May we be pardoned for suggesting that this argument is possessed of academic interest only.

Rate of exchange between Italy and United States.—On February 4, 1919, the Lackawanna National Bank quoted Italian lire at $5.66 per hundred, or $0.0566 each. Assuming an average stable value of the lira of $0.193, this means a drop in the purchasing power of 70.6785 per cent. If uncertain and incalculable factors are disregarded, such as the present political situation, strikes, local

boundary disputes, etc., all of which have a certain indeterminable influence, a calculation can be made as to what effect a curtailment of pumice shipments would have on the rate of exchange. This calculation is naturally based on the trade balance.

In the year ending June, 1918, we exported to Italy a total of $477,898,744 worth of all kinds of merchandise, importing during the same period $30,014,349 worth of merchandise, both free and dutiable, leaving Italy with a trade balance of minus $447,884,395. (Reference, Statistical Abstract of United States, 1918, p. 336.)

According to the customs tables (see Appendix), Italy shipped into America during the fiscal year of 1918 $36,466 worth of unmanufactured stone. If this entire amount were deducted from her total exports to the United States her trade balance would be minus $447,847,929.

The problem is, therefore—

If a trade balance of—$447,884,395 decreases the purchasing power of a lira in America by 70.6735 per cent, by what per cent will a trade balance of minus $447,847,929 decrease it?

Carrying the calculation out to four decimal places, the answer is found to be 70.6793 per cent, or, in other words, that the lira would be decreased by a further fifty-eight ten-thousandths of 1 per cent. Under the normal value of 19.3 cents for the lira, this would be equivalent to about eleven-thousandths of a mill, an extremely infinitesimal fraction when compared with the ordinary fluctuations of exchange.

APPENDIX.

Pumice stone, manufactures of, or of which pumice stone is a component material of chief value, n. s. p. f. (Acts of 1909 and 1913.)

Fiscal year.	Rate of duty.	Value.	Duty collected.	Average ad valorem rate.
				Per cent.
1910	35 per cent	$8,991	$3,146	35
1911	do	15,868	5,553	35
1912	do	10,448	3,656	35
1913	do	12,231	4,280	35
1914	do	4,165	1,457	35
1914	25 per cent	5,772	1,443	25
1915	do	115	28	25
1916	do	945	236	25
1917	do	1,743	435	25
1918	do	2,025	506	25

Pumice stone, unmanufactured, valued at more than $15 per ton. (Act of 1909.)

Fiscal year.	Rate of duty.	Quantity.	Value.	Duty collected.	Value per unit.	Average ad valorem rate.
		Tons.				*Per cent.*
1910	$5.60 per ton	311	$22,647	$1,744	$72.82	7.70
1911	do	432	27,377	2,421	63.32	8.84
1912	do	366	22,560	2,050	61.64	9.00
1913	do	353	17,598	1,977	49.82	11.24
1914	do	127	6,518	712	51.20	10.94

Pumice stone, unmanufactured, valued at $15 per ton or less. (Act of 1909.)

Fiscal year.	Rate of duty.	Quantity.	Value.	Duty collected.	Value per unit.	Average ad valorem rate.
		Tons.				*Per cent.*
1910	30 per cent	3,967	$25,014	$7,504	$6.31	30
1911	do	5,351	31,378	9,413	5.86	30
1912	do	5,576	32,559	9,767	5.84	30
1913	do	5,295	26,876	8,062	5.16	30
1914	do	1,639	8,904	2,671	5.43	30

Imports of pumice stone, unmanufactured.

Fiscal year.	Rate of duty.	Quantity.	Value.	Duty collected.	Value per unit.	Average ad valorem rate.
		Tons.				*Per cent.*
1908	15 per cent	3,687	$44,912	$6,736	$12.18	15
1909	do	3,289	31,114	5,117	10.37	15
1910	do	1,527	11,883	1,782	7.78	15
1914	5 per cent	5,297	42,005	2,100	7.93	5
1915	do	6,060	47,469	3,373	7.83	5
1916	do	8,650	69,311	3,465	8.01	5
1917	do	7,205	76,620	3,831	10.68	5
1918	do	3,900	38,466	1,823	9.35	5

Imports of pumice stone wholly or partially manufactured.

Fiscal year.	Rate of duty.	Quantity.	Value.	Duty collected.	Value per unit.	Average ad valorem rate.
		Pounds.				*Per cent.*
1908	$6 per ton	5,425,280	$43,119	$14,536	$0.007	33.71
1909	do	5,474,560	43,096	14,666	.008	34.03
1910	do	1,301,440	9,457	3,490	.007	36.91
1910	½ cent per pound	4,933,672	27,381	18,501	.005	67.57
1911	do	7,838,607	38,985	29,394	.004	75.40
1912	do	6,289,480	29,240	23,585	.005	80.66
1913	do	3,845,326	17,417	14,419	.005	82.79
1914	do	1,596,044	6,013	5,985	.004	99.52
1914	¼ cent per pound	4,888,831	22,267	12,222	.005	54.90
1915	do	6,013,747	27,152	15,034	.004	55.37
1916	do	5,616,012	44,186	14,040	.008	31.77
1917	do	7,790,173	64,865	19,490	.008	30.05
1918	do	3,238,776	34,262	8,096	.011	23.63

SAN FRANCISCO, CALIF., *November 26, 1919.*

This is to certify that the cost of landing our pumice in New York from deposits owned and leased and worked by us jointly in Siskiyou County, Calif., and generally known as the Mount Shasta pumice deposits, is as follows:

Labor, per ton		$5.00	
Hauling and loading		2.75	
			$7.75
Freight (25-ton car):			
Switching charge at Bartle, $15 per car		.60	
Main line point from Bartle	$0.22		
Main line point to New York	.87½		
Total per 100 pounds	1.09½		
Equivalent, per ton		21.90	
		22.50	
3 per cent war tax		.68	
			23.18
			$30.93
Add 20 per cent gross profit			6.19
Total			37.12

This cost of $37.12 does not include any overhead nor value per ton of product in deposit nor any special treatment.

W. A. T. AGARD.

AFFIDAVIT.

I, James R. Mason, of the city of Los Angeles, County of Los Angeles, State of California, hereby certify that for the past five years I have been personally in charge of the books and accounts of Brand & Stevens (Ltd.), covering their operations in the mining of pumice stone in Imperial County, California; and that for the past two years I have been personally in charge as general manager of said pumice operations.

I hereby certify that the present costs per ton of pumice stone for grinding, landed at the Atlantic seaboard, as shown by the books of said Brand & Stevens (Ltd.), and as developed from my own knowledge of the actual conditions, are as follows:

Labor	$10.50
Hauling	3.00
Freight	17.70
Taxes	.50
Interest	.60
Insurance (general and employees')	.60
	32.90
Amortization, depreciation, and maintenance; 10 per cent	3.29
Add 20 per cent gross profit	6.58
Cost per ton	42.77

JAMES R. MASON.

Mr. TILSON. Mr. Chairman, I ask the privilege of filing certain letters and communications on this subject at this point.

MERIDEN, CONN., *December 24, 1920.*

DEAR SIR: We understand that the Ways and Means Committee have issued a notice of a hearing January 10 and 11 for the purpose of considering briefs for and against a protective tariff on Italian pumice stone.

We are probably the largest individual users of Italian ground pumice stone in the industries aside from manufacturers of soap.

During the past two years, due to circumstances, we were compelled to use a domestic product mined in California and ground in the Eastern States. Our experience was that the domestic product was less than 50 per cent as efficient as Italian pumice stone; and while we believe in protective tariff, we feel that the question of increasing or applying a tariff on Italian pumice stone in the interests of the California product should be considered carefully.

We believe it to be a fair statement that, aside from the use in manufacturing of soaps, the California product is in no way as efficient as the Italian product.

INTERNATIONAL SILVER CO.,
A. C. GARDINER.

SIR: The present cost of unmanufactured Italian pumice stone is $13.50 per ton c. i. f. New York, so that 5 per cent ad valorem duty yields a revenue of approximately 70 cents per ton. In our opinion pumice stone unmanufactured should be assessed not to exceed $1 per ton specific duty, because pumice stone must be imported from Italy, as none has been found in this country (after exhaustive search extending over a long period) that is equal and can take the place of the Italian pumice stone.

Wholly or partially manufactured pumice stone should be assessed not less than the present tariff of one-fourth cent per pound to protect the American industries.

Manufactures of pumice stone of which pumice stone is the component material of chief value, if necessary to be assessed at all, the assessment should not exceed one-fourth cent per pound. The customhouse has been applying this paragraph to bimsstein imported from Germany, into the manufacture of which no pumice stone enters. Bimsstein consists entirely of a clay and flint combination, which, in the making of brick, is baked in a kiln, and neither a suitable clay nor a suitable flint has ever been found in this country.

Reason for duty of one-fourth cent per pound on manufactured and manufactures of pumice stone.—Pumice stone manufactured in Italy is being sold in bags f. o. b. docks New York to-day at a price of $24 per ton of 2,000 pounds duty paid f. o. b. New York or $19 per ton c. i. f. New York. The freight rate from Italy to New York is 35s. per ton. or $7, showing the Italian producer can produce the ground pumice stone at a price of $12 per ton f. o. b. Italy, bags included.

The cost of powdering the Italian pumice stone in the mills in this country is $65 per ton f. o. b. New York, due to the higher cost of labor and materials, and also because the freight rate from Italy to New York on the crude unmanufactured pumice stone is 48 shillings per ton or $12 per ton, and the cost of the raw material is $13.50 per ton, or a total cost of $25.50 per ton, to which must be added duty of 68 cents, making the cost $26.18 per ton at the docks, New York, duty paid.

Lighterage and drayage from the steamship piers to our plant, which is ideally situated at the Bush terminal, is no mean factor in the cost, since such lighterage and drayage figures $2 per ton.

It will thus be seen the total protection given the American producer under the suggested rates would be only $4 per ton, and any increase in the duty on the unmanufactured grinding rock would only increase the price to the consumer, as there is no pumice stone produced in the United States that can replace the Italian pumice stone, as evidenced by the letters received from users of pumice stone who were forced to use domestic pumice during the World War.

The amount of pumice stone used in this country is rather limited and, therefore, as a revenue producer would not be of vital importance, though we believe that some duty should be assessed and thus create some revenue, but it should not exceed the amount recommended; otherwise it will cause a burden on the consumer in this country and possibly reduce the use of it to more than offset any additional revenue that could be obtained.

JAMES H. RHODES & Co.
F. L. GOETZ, *Vice President.*

WALLINGFORD, CONN., *December 28, 1920.*

DEAR SIR: For several years we have used American-ground Italian pumice stone with satisfactory results. During the war it was necessary to create a domestic substitute, which was never found satisfactory by us, and as we understand that there is to be a pumice-stone hearing on January 10 or 11 and pressure is to be brought bear to place a heavy tariff against the Italian pumice stone, we would ask you to protect our interests in the matter.

There is no question in our mind but what the American-ground Italian pumice stone is far superior to any domestic product, and we think during the war we tried most all of them.

R. WALLACE & SONS MFG. CO.,
D. W. WILLIAMS, *Purchasing Agent.*

FRANK L. GOETZ, OF JAMES H. RHODES & CO., CHICAGO, ILL.

Mr. GOETZ. Mr. Chairman, we import pumice stone—that is, the raw material—and grind it here, and so we are interested in paragraph 75.

This paragraph of the tariff act of 1913 provides for a tariff on unmanufactured pumice stone—that is, the raw material—a 5 per cent ad valorem, wholly or partially manufactured, one-quarter of a cent a pound. The tariff that we desire on pumice stone unmanufactured is 65 cents a ton specific. Sixty-five cents a ton is practically the same as 5 per cent of the present value of the unmanufactured pumice stone, $13.50 f. o. b. shipping point Italy.

The reason why we do not think that the tariff should be increased is that all pumice stone must be imported from Italy. None has been found in this country even after considerable search that is equal to or can take the place of that imported pumice stone.

Mr. BACHARACH. Have you ever used the domestic pumice stone?

Mr. GOETZ. We have used domestic pumice stone. We used it during a period of three or four months when during the war embargoes to conserve shipping space prevented our bringing in the Italian rock, so we bought from the California producers raw California pumice stone and powdered it. We shipped the pumice stone out to the trade, represented it for what it was, and told them that this is the best pumice stone that we can give them since the Italian pumice stone is not obtainable. The consequences of that was that when the embargo was lifted our customers, representative users, big users, asked us to take off their hands the pumice stone they had received from us, the California pumice stone, because it would not do the work. It was not equal to the Italian pumice stone.

Mr. GARNER. I understand there is really very little competition between pumice stone in the United States and Italian pumice stone.

Mr. GOETZ. It is not in competition really so far as equal qualities are concerned.

Mr. GARNER. Then, you will be compelled—or those who desire to use pumice stone—to continue the importation of the Italian stone?

Mr. GOETZ. Yes. I hold no brief for the Italian stone, but I do hold a brief for the users of pumice stone in this country and for those who grind and powder pumice stone in this country. Prohibiting by means of an exorbitant tariff the importation of Italian pumice stone will result either in forcing the finishers of marble, automobiles, rubber, celluloid, wood (pianos, victrolas, furniture, etc.), glass (mirrors, optical lenses), ivory, metals, and manufacturers of soap to pay an excessive price for pumice stone needlessly, since there is no domestic pumice stone which will satisfactorily replace the Italian pumice stone or even in the event that in preference to paying the excessive prices, these trades should use domestic pumice stone, the inferiority of the finish that they will be able to obtain on their product will cause the ultimate consumer to demand these products from abroad on account of the superior finish which foreign manufacturers will be able to give their products by virtue of the use of Italian pumice stone. Thus the committee in attempting to protect the American pumice-mining industry, will, instead, be protecting foreign finishers of the articles above named.

Mr. GARNER. If we wanted to get the maximum amount of revenue from that article, we would probably levy two or three dollars a ton on it. Can you stand that?

Mr. GOETZ. We recommend that it be not more than 65 cents.

Mr. GARNER. I know what you recommend. I am trying to get something in the Treasury. My friend over here is trying to protect the pumice-stone industry of the country. If I got your statement correct, why, we can levy some two or three or four dollars a ton on this, because the people who use it are compelled to buy. Therefore I am going to get a good deal of money into the Treasury.

Mr. GOETZ. I would not put it as strong as that, Mr. Congressman.

Mr. GARNER. I wanted to find out how much we could levy—what would be the maximum amount we could get out of that as a revenue measure.

Mr. GOETZ. Why, I should say that the maximum amount would be $1 a ton. It is not an important commodity.

Mr. GARNER. If we levy more than $1 a ton they would probably quit importing it.

Mr. GOETZ. They might. They might find another process of doing their work.

Mr. BACHARACH. How many tons of pumice stone do we use a year?

Mr. GOETZ. I can tell you the figures for the 12 months between October 1, 1919, and October 1, 1920. That is as far as the Department of Commerce have their figures. The unmanufactured is 10,961 tons.

Mr. BACHARACH. So, if there was a leavy of $2 a ton, as my friend from Texas would like to have, it would only amount to $20,000?

Mr. GOETZ. It would amount to $20,000.

Mr. HADLEY. What percentage of the domestic consumption is produced in America?

Mr. GOETZ. The smallest kind of percentage.

Mr. HADLEY. How much labor enters into the manufactured product in this country?

Mr. GOETZ. Well, to illustrate, our manufacturing cost would approximate us $60 to $65 a ton. The raw material cost is $13.60 a ton f. o. b. shipping point Italy. The bulk of the cost is labor—labor and American materials.

Mr. GARNER. Finally the consumer, if I understand you, pays about an average of $100 a ton for it—the ultimate consumer?

Mr. GOETZ. Yes. The man who buys one or two barrals would pay an average price of $100 a ton.

Mr. GARNER. About $100 a ton. You think increasing the duty from 65 cents a ton to as much as $1 would probably keep them from using the Italian stone? If they increase as much as 1 per cent of the ultimate cost it would cause the people to quit using it?

Mr. GOETZ. I think it would cause them to try some other process; and I do think, if it would not do that, it would at least curtail the importation of pumice stone, so that the amount of duty that the Government would receive would be less than it is at present.

May I finish with the rest of my statement? Wholly or partially manufactured pumice stone should be assessed not less than the present tariff of one-quarter of a cent a pound to protect the American industries. Our reason for a duty of a quarter of a cent a pound——

Mr. GARNER. Pardon me, that is the part you perform, isn't it?

Mr. GOETZ. No. We import the crude Italian pumice stone; that is, the rock in that form. Italy also ships to this country pumice stone ground from that same rock, powdered by them, and shipped in here in competition with the pumice stone that we ourselves powder.

Mr. GARNER. From their raw material?

Mr. GOETZ. From their raw material.

Mr. GARNER. So what rate of duty do you want on the ground?

Mr. GOETZ. One-quarter of a cent a pound. We say that pumice stone manufactured in Italy is being sent in bags f. o. b. dock New York to-day at the price of $24 per 2,000 pounds, duty paid f. o. b. New York, or $19 per ton c. i. f. New York. The freight rate from Italy to New York is 35 shillings per ton, or $7, showing the Italian producer can produce the ground pumice stone at a price of $12 per ton f. o. b. Italy, bags included.

The cost of powdering the Italian pumice stone in the mills in the United States has increased, due to the higher cost of labor and mate-

rials, and also because the freight rate from Italy to New York on the crude manufactured pumice stone is 48 shillings per ton, or $12 per ton, and the cost of the raw materials is $13.50 per ton, or a total cost of $25.50 per ton, to which must be added duty of 65 cents per ton, making the cost of $26.15 per ton at docks New York, duty paid. Well, now, that is increased since 1913 as follows:

	1913	1920
Cost of raw pumice stone in Italy (per ton)	$8.00	$13.50
Common labor (per day)	$2.00	$4.00
Superintendents (per month)	$150.00	$225.00
Rent, per square foot	$9.25	$0.50
Power, per kilowatt hour	$0.02½	$0.03
Barrels (each)	$0.55	$1.75
Supplies, etc		[1] 100–150
Operating (hours per day)	10	8

[1] Per cent more.

All the above figures apply on the same mill for the same production.

Lighterage, drayage, and demurrage from the steamship piers to our plant, which is ideally situated at the Bush Terminal, is no mean factor in the cost, since such lighterage, drayage, and demurrage figures $3 per ton.

It will thus be seen the total protection given the American producer under the suggested rates would be only $4.35 per ton, and any increase in the duty on the manufactured grinding rock would only increase the price to the consumer, as there is no pumice stone produced in the United States that can replace the Italian pumice, as evidenced by the many letters received from important users of pumice stone who were forced to use domestic pumice for several months during the World War.

We respectfully recommend the simplicity and general satisfaction of a specific duty. It saves time, trouble, and annoyance and expense to customs authorities and importer alike by eliminating complications brought about by changing values due to fluctuating exchange; and the sometimes unavoidable failure of consular invoices with certificate of depreciation attached, to arrive in time for customs entry.

For these and other reasons it is almost impossible to obtain the proper market value on this unimportant commodity.

If the duty is changed to a specific duty of 65 cents per ton the Government will then obtain a revenue of 60 per cent over that obtained in 1913, and it will be a more just and satisfactory duty to both the importer and the Government.

During the year October 1, 1919, to October 1, 1920, the amount of pumice stone used in this country was as follows:

Unmanufactured, 10,961 tons; wholly or partially manufactured, 8,607,255 pounds.

It will be seen, therefore, that the amount of pumice stone used in this country is rather limited and therefore, as a revenue producer, would not be of vital importance, though we believe that some duty should be assessed and thus create some revenue—but it should not exceed the amount recommended, otherwise it will cause a burden on the consumer in this country and possibly reduce the use of it to more than offset any additional revenue that could be obtained.

Should the committee desire further information on the points covered or on points not covered herein we should be pleased to furnish the same.

Yesterday a representative of the California producers of pumice stone asked that the tariff on both the raw material and the finished product be 1 cent a pound. The present tariff on unmanufactured pumice stone is 65 cents a ton. When the California producer asks a tariff of 1 cent a pound he is asking an increase of 3,000 per cent tariff.

Mr. GARNER. But you do not want him or anybody else to have that; yet you want the cheapest raw material you can get, and you want the best tariff you can get on the manufactured product?

Mr. GOETZ. Yes, sir. I do not ask for free raw material. At 65 cents a ton specific the Government is receiving more tariff on pumice stone than they received in 1913, because we had lower cost at that time. But the California producers yesterday said that their cost of landing the pumice stone in New York is higher than the importer's cost of the Italian material. Well, now, I am sure that this committee is going to consider why it is necessary to land this pumice stone in New York, I mean pumice stone from California. More than half of the pumice stone consumed in this country we consume west of and including Detroit. So that in citing a freight rate from California to New York you are certainly citing the highest possible freight rate that you can get in this country, because you can not go into the Atlantic Ocean with a railroad train.

Another point: We gave the California pumice stone every opportunity to show that it was equal to the Italian pumice stone, to prove that it would do the work of the Italian pumice stone; and the president of our company even took the matter up with the War Trade Board during the war. After examining the pumice stone personally he thought it would fill the bill, and he asked that the Government continue the embargo on Italian pumice stone, that we could get along with this pumice stone. The developments after we had shipped the pumice stone to the trade proved very conclusively that that pumice stone would not answer the purpose at all. I have had 15 years' experience in selling pumice stone. I know the purposes for which it is used, and you can not think of handing to a finisher of a Packard automobile, or any good automobile, a piece of California lump pumice stone, not unless you have a great big accident policy.

The CHAIRMAN. If you were in the California man's place your position would be different, would it not?

Mr. GOETZ. No; it would not, Mr. Chairman, for this reason: I hold no brief for Italy, but Italy is the source of the world's supply of pumice stone for the reason that nature has been kinder to Italy than she has been to either California or any other country, in that pumice stone from Italy is different—is superior to any pumice stone found elsewhere. Pumice stone is found in a number of States in the western part of the United States; also in Mexico and in South America, and other European countries beside Italy. Some of the deposits have from time to time been exploited only to be ultimately abandoned because of the superior quality of the Italian pumice stone.

Literally, the pumice-stone consuming world has made a beaten path to Italy, because she produces naturally a better pumice stone

than has been found anywhere else in the world. By the laws of natural selection pumice-stone deposits have been abandoned in practically every part of the world except Italy. In our opinion, because of failure in time to recognize this law of natural selection, the California producer seeks to nullify that law by a prohibitive duty which, in the face of the facts, is unwarranted.

As to the labor employed in mining the Italian pumice stone and the statement by the California producer that that labor is Italian convict labor, the committee and every American legislator knows that our laws prevent convict-made goods of any description from entering this country. As between Italian peasant labor and Mexican peon labor, we believe the choice of Italian labor to be universal, because the temperature in Lower California, where California pumice stone is mined, does not attract the "native sons of the golden West," but, instead, only the lowest form of Mexican labor.

The CHAIRMAN. Suppose we had a war and were driven from the sea with our ships, as Germany was, what would we do for pumice stone? We would put our own supply out of business?

Mr. GOETZ. Then we would have to use the next best.

The CHAIRMAN. We would have to establish the industry after the war broke out, would we not?

Mr. GOETZ. I would not say so. There are other things.

The CHAIRMAN. I think it is much better to produce at home the things we can produce.

Mr. GOETZ. Yes; when you can produce them.

The CHAIRMAN. I can not forget the lesson we learned during the war.

Mr. GOETZ. Yes; if we can produce them nearly so good, but we can not produce them nearly so good, because we have not got the raw material.

Mr. RAINEY. Pumice stone is of volcanic origin?

Mr. GOETZ. It is of volcanic origin.

Mr. RAINEY. In order to establish a business here that will compete with the pumice-stone operations in Italy we will have to have some volcanoes?

Mr. GOETZ. Yes; we would have to have volcanoes that would erupt.

The CHAIRMAN. We had one very great volcanic eruption on the 2d of November.

Mr. GOETZ. Mr. Chairman, the peculiarity of Italian pumice stone is that it is erupted through water; that makes a physical change in the lava and makes the pumice stone different.

BRIEF OF JAMES H. RHODES & CO., CHICAGO, ILL.

HONORABLE SIRS: Paragraph No. 81 of the tariff of 1913 reads:

"Earthy or mineral substances wholly or partially manufactured and articles and wares composed wholly or in chief value of earthy or mineral substances, not specially provided for in this section, whether susceptible of decoration or not, if not decorated in any manner, 20 per centum ad valorem."

Tariff desired.—We would recommend that the above-mentioned section of clause 81 should be changed to read "½ cent per pound."

Reasons.—This clause covers imported rubbing stone, which is only made in Europe and used for finishing varnished surfaces. It consists of a combination of decomposed clay and flint, which is not found in this country; and even during the period of the war, although attempts were made to make it here, they failed,

and the industries were handicapped considerably because of their inability to obtain this material.

A specific duty of ½ cent per pound should be assessed rather than any ad valorem duty.

We respectfully recommend the simplicity and general satisfaction of a specific duty. It saves time, trouble, annoyance, and expense to customs authorities and importer alike by eliminating complications brought about by changing values due to fluctuating exchange, and the sometimes unavoidable failure of consular invoices, with certificate of depreciation attached, to arrive in time for customs entry.

The quantity imported is limited. As far as the revenue to the Government is concerned, it would not affect it one way or the other, the article being a cheap commodity, selling previous to the war at approximately 2 cents per pound f. o. b. point of shipment.

This specific duty would be equal to about the same duty collected previous to the war on a basis of 20 per cent ad valorem.

Should the committee desire any further information on the points covered or on points not covered herein, we should be pleased to furnish the same.

F. L. GOETZ, *Vice President.*

NEW YORK, N. Y., *November 30, 1920.*

DEAR SIRS: I have your letter of November 24 in regard to the possibility of bill being introduced at the next Congress providing for a prohibitive tariff on the importation of pumice from Italy.

I consider that this would be very unfair, because the domestic pumice is very much inferior to the Italian pumice. I believe the domestic pumice will do no more than 50 per cent of the work the Italian will do; even then it does not turn out the same quality product. If there was any comparison between the two grades of material, I would be one of the first to be in favor of a duty; in fact, as far as I would be concerned, the duty would not be necessary, as I most certainly would buy the domestic in preference to the foreign article if it were possible to use the domestic material.

If there is anything further I can do in this matter, do not hesitate to call upon me.

L. DARLING, *Assistant Purchasing Agent.*

MERIDEN, CONN., *November 30, 1920.*

GENTLEMEN: Answering your letter of November 22, we are very much interested in your statement that an attempt would be made to introduce a bill for a prohibitive tariff on the importation of Italian pumice stone.

While we believe in protective tariff and wish to encourage home industry, it is yet to be demonstrated that domestic pumice stone is equal in any particular to the imported Italian pumice stone.

As far as our business is concerned there is no comparison, and we believe that the domestic pumice is not 50 per cent as efficient as the foreign product.

We do not hesitate in putting ourselves on record as being opposed to a prohibitive tariff on this product.

We would be pleased, indeed, to have you express these as our views to any interested party.

INTERNATIONAL SILVER CO.,
W. GARDINER.

WORCESTER, MASS., *November 23, 1920.*

GENTLEMEN: We have your letter of November 22 and are surprised and regret to hear that a bill will be introduced at the next session of Congress providing for a prohibitive tariff on the importation of pumice from Italy for the purpose of forcing domestic pumice on the trade in this country.

We are, and have been for years, users of considerable amounts of pumice in the manufacture of hand soaps. We have experimented with domestic pumice which has been submitted to us by various concerns and have never found any that would answer our needs.

We absolutely require the Italian pumice stone, ground and bolted in this country, to insure the best and uniform quality, and any tariff imposed on Italian pumice stone would necessarily increase the selling price of our soap.

A very large part of our production goes to machinists and other workmen who ought to be able to buy their soap at the lowest possible price. We hope, therefore, that the bill mentioned will not prevail.

THE WHITE & BAGLEY CO.,
H. P. BAGLEY, *President and Treasurer.*

WALLINGFORD, CONN., *November 23, 1920.*

We have yours of the 22d and have not heard of the impending bill to prevent importation of Italian pumice. We believe this would be a great hardship on the manufacturers using pumice, not only in the way of competition but also for the reason that no domestic pumice that we have ever tried has given satisfaction. Therefore, we trust you will use your influence to bring the truth to light.

R. WALLACE & SONS MFG. CO.,
D. W. WILLIAMS, *Purchasing Agent.*

NEWARK, N. J., *November 29, 1920.*

GENTLEMEN: We have your letter of November 24 with reference to the tariff situation on pumice stone.

Pumice stone is an absolutely essential article in the manufacture of rubber erasers. Rubber erasers are used by every school, every bank, business house, and factory in the United States, as well as on the tip of virtually every lead pencil.

The only satisfactory pumice stone that can be used is the Italian pumice stone, but it must be American ground. We have tried a certain so-called pumice stone, a product of California, which is absolutely worthless so far as the manufacture of rubber erasers is concerned.

While we would naturally prefer to use an American article in preference to the imported, it is utterly impossible to do so in this case, for the so-called American pumice stone has not the proper cutting qualities.

We therefore are greatly opposed to Congress providing for a higher tariff on pumice stone, as this will add to the cost of a necessity required by every man, woman, and child.

A. W. FABER (INC.),
H. FABER, *Manager.*

NIAGARA FALLS, N. Y., *November 26, 1920.*

GENTLEMEN: Replying to yours of Jauary 24 regarding the new tariff to be placed upon Italian pumice stone, would advise that this will work a very great hardship on all silverware manufacturers, inasmuch as the California pumice is not suitable for fine work.

Anything that we can do to prevent this tariff from being placed on Italian pumice we will be glad to do if you will so advise.

WM. A. ROGERS (LTD.),
By F. W. INGRAM.

CONNERSVILLE, IND., *December 23, 1920.*

GENTLEMEN: We have your favor of the 20th instant, regarding the proposed increase in the import duty on Italian pumice stone. This, as we understand it, will greatly favor the use of California lump. We certainly hope that such a bill will expire in committee, for the very reason that, so far as we are concerned, California pumice stone is of absolutely no value, and in our business pumice stone, both lump and powdered, plays a very important part. It would look to us as though any increase in the import duty on the Italian pumice stone would mean the increase of the price to the consumer and would work a hardship, because the consumer would either have to use the California pumice on account of the price or pay a much higher price for the Italian.

We will certainly be glad to write to our Representative and Senator, and anything further we can do we would be glad to have you advise us.

REX MANUFACTURING CO.,
W. O. HULL, *Purchasing Agent.*

NEW YORK CITY, *December 8, 1920.*

GENTLEMEN: Answering your letter of the 7th instant, H. L. G., we would appreciate it if you would enter a very strong protest against imposing a prohibitive tariff on the importation of Italian pumice stone, as this class of material is the only grade that we have found suitable for lithographic work, domestic pumice being very unsatisfactory.

THE FUCHS & LANG MFG. CO.
W. H. LYNCH.

ROCHESTER, N. Y., *December 8, 1920.*

GENTLEMEN: We are in receipt of yours of the 7th in reference to tariff on pumice.

Domestic, so called, pumice, is so far from being satisfactory for any work that we have, and, as far as we know, it is generally considered as an inferior article to the imported stock, that we can not understand how Congress could put across anything of this kind.

We believe in a protective tariff, provided we can be furnished material as good as is required, but as they can not produce good pumice, we, of course, would be very much opposed to Congress raising the present tariff, if there is any.

BARTIAN BROS. CO.

BRIDGEPORT, CONN., *December 9, 1920.*

GENTLEMEN: Replying to your letter of the 8th, would say we note a bill is to be introduced into Congress providing for a prohibitive tariff on the importation of pumice from Italy.

We do not consider it fair that this bill should be passed by Congress, particularly as the pumice produced in this country is of such an inferior quality that it can not be used for finishing high-grade silverware such as we manufacture.

We found that the American pumice was full of foreign substances which cut and scratched the finished work, and it was impossible to obtain a perfect polished surface the same as we do with the Italian pumice, which is of a very even and fine quality. This fine quality is absolutely essential to manufacturers of silverware, and we hope that the price will remain within our reach.

ALBERT PICK & CO. (INC.), OF BRIDGEPORT.
G. T. ITTIG, *Manager.*

PROVIDENCE, R. I., *December 9, 1920.*

DEAR SIR: Your letter of the 8th at hand and contents noted, and in reply would say that it is absolutely impossible for us to use the pumice stone which comes from California, as it is not of the right substance for our use. The only thing we can use is the Italian pumice stone such as you have already sold us for the past 12 years. We do not believe that anyone who has used the Italian pumice stone can afford to use the domestic pumice stone which comes from California, and if a tariff is put on the importation of the pumice stone from Italy it will only mean increased cost of production, which is the thing that is causing high prices in this country to-day.

AMOS M. BOWEN, *Treasurer.*

PROVIDENCE, R. I., *November 24, 1920.*

GENTLEMEN: We have your letter of the 22d instant, concerning bill to be introduced at the next session of Congress providing for "prohibitive tariff on

the importation of pumice sent from Italy." We understood that this is for the purpose of forcing domestic pumice on the market in place of the Italian.

We have had some experience with domestic pumice and feel that it would be a very great disadvantage if we were forced to use this material.

We hope you will do all you possibly can to prevent the passing of this bill and we shall be very glad to cooperate with you.

GORHAM MFG. CO.,
C. C. GREENE,
Purchasing Agent.

NEW LONDON, WIS., *December 20, 1920.*

DEAR SIR: A bill has been presented by the producers of California lump pumice stone to the Ways and Means Committee. This bill provides for an increase in the import duty on Italian pumice stone.

Our experience as consumers of pumice stone leads us to believe that it would be impossible for us to use an American pumice stone. We have tried it in several instances and find that it is by far inferior to Italian pumice stone.

We are therefore asking that you protest against an increase in duty on the Italian pumice stone.

WISCONSIN CABINET & PANEL CO.,
L. E. SHALLBERG,
Purchasing Department.

SYRACUSE, N. Y., *November 23, 1920.*

GENTLEMEN: This will acknowledge your letter dated November 22, in which you advise us that a bill will be introduced at the next session of Congress that will provide a prohibitive tariff on the importation of Italian pumice.

We are indeed surprised to learn of such a bill. Surely no fair-minded Congressman will countenance it providing he has been made acquainted with the difference between the Italian and American pumice. We believe that all users of pumice have learned from experience that where it is necessary that a highly finished product be secured the American pumice is very much inferior to the Italian pumice.

We wish to take this opportunity to thank you for calling our attention to this measure. We wish to advise, too, that we are writing direct to our Congressman to enter our objections to the passage of such a bill.

H. H. FRANKLIN MANUFACTURING CO.,
E. M. LARKIN,
Purchasing Department.

NEW YORK, N. Y., *November 23, 1920.*

GENTLEMEN: Replying to your letter of 22d instant by your Mr. Geddes, we regret to note action contemplated by the next session of Congress, with a view to putting a prohibitive tariff on the importation of pumice from Italy.

We have used various grades of pumice in powdered form, and have used same for a great many years. During this time we have experimented with so-called domestic pumice and our experience has been that it does not have the cutting qualities of genuine Italian pumice nor does it stand up as long, which is our reason for insisting on genuine Italian pumice.

We trust our experience, which we believe is the same as others in a like position, will have some weight in determining the action of any legislation by the next Congress, regarding instituting a tariff on the importation of Italian pumice.

AMERICAN HARD RUBBER CO.,
A. P. HOUSE,
Assistant Purchasing Agent.

ROCHESTER, N. Y., *December 31, 1920.*

GENTLEMEN: Answering yours of December 28, in accordance with your suggestion, we have written our representatives calling their attention to the importance of imported pumice stone, protesting against the placing of a high protective tariff on its importation.

We trust that your efforts at the pumice-stone hearing will be successful, and in the meantime we are calling the matter to the attention of everyone interested.

STECHER LITHOGRAPHIC CO.,
G. F. MCGRATH,
Purchasing Agent.

ROCHESTER, N. Y.

GENTLEMEN: Answering yours of November 24, in our opinion domestic pumice does not compare favorably with the pumice imported from Italy.

STRETCHER LITHOGRAPH CO.

PROVIDENCE, R. I., *December 13, 1920.*

DEAR SIR: We are in receipt of your letter of December 8 and you may rest assured that we will do anything you suggest to cooperate with you, even to the extent of writing our Senators and Congressmen, if you believe this a good plan, in regard to the proposed bill providing for a prohibitive tariff on the importation of pumice from Italy.

We might suggest that it is our opinion that all the ring-traveler manufacturers in the country, and there are only seven, would gladly write to their Representatives in Congress if you think this is a good plan when the thing is ripe.

It is our experience that domestic pumice is almost useless for our purpose. It would be a severe trial for us to be obliged to use domestic pumice, and we can not see how it is benefiting the American industry any to prohibit the importation of Italian pumice, for it is far and away superior to anything else on the market, for our particular purpose at least.

We trust you may be able to fight down any such bill as is proposed, and as stated before we will do anything you may suggest to help you out.

VICTOR RING TRAVELER CO.,
JOHN E. HALL, *Manager.*

INDIAN ORCHARD, MASS., *December 6, 1920.*

GENTLEMEN: Replying to your letter of November 24 would state that the writer has just returned from a business trip and was therefore unable to give your letter his attention until to-day.

Regarding the results which we have obtained from American pumice, would advise that we found the American grade to contain a larger percentage of foreign matter, necessitating our using from 25 per cent to 50 per cent more than the Italian pumice on an equal amount of work.

THE FIBERLOID CORPORATION.

BRIEF OF BRAND & STEVENS (LTD.), NEW YORK CITY, IN REBUTTAL OF STATEMENT OF JAMES H. RHODES & CO.

The time at my disposal during the hearing was insufficient to permit me to prepare a verbal rebuttal of the claims of James H. Rhodes & Co., who, through their vice president, Mr. F. L. Goetz appearing before your committee on January 11, opposed this measure. I understood, however, that you would give me permission to file a statement in answer to James H. Rhodes's claim. Because of this, and because our present situation is sufficiently serious to justify our making every legitimate effort to properly present our case before your committee, I respectfully solicit your consideration of the following points:

1. The only firm appearing before the Ways and Means Committee to oppose our efforts to secure the above mentioned tariff on pumice stone is the one mentioned above, who, according to their own statement, "handle 65 per cent of all the Italian pumice coming into this country." (See letter of James H. Rhodes & Co.) They ask for a flat rate of 65 cents a ton on the raw stone and one-fourth of a cent per pound on the manufactured or partially manufactured.

Answer. With the last increase in railroad freight rates, it now costs the American producer an average of $44.38 per short ton delivered on the Atlantic Seaboard. Of this cost $22.56 is the average freight per short ton and 67.7 cents is the war tax per ton on bill of lading.

According to Mr. Goetz's testimony the corresponding stone is now bought in Italy for $13.50 a ton, to which must be added 48 shillings for freight, which latter figure he translates into American currency at $12. According to the present rate of exchange, which is now higher than it has been for some time, 48 shillings would be equivalent to $9.12 instead of $12, so that the actual cost of Italian stone delivered on the Atlantic Seaboard, duty paid, would be $23.27, instead of $26.15, the figures given in the previous citation, even if we assume that the error in interpreting the exchange between shillings and the American monetary standard was confined solely to the question of freight rates and not to the price of the raw material, in Italy.

From these comparative figures it will be seen that an increase in the tariff of 1 cent per pound, or $20 a ton, raising the Italian to $43.27, would still leave the Italian stone the benefit of a slight margin.

Mr. Goetz state "the Italian producer can produce ground pumice stone at a price of $12 a ton, bags included. It will be noticed that this price of $12 a ton is for ground or manufactured stone, while the $13.50 is for crude stone. We submit this evidence, furnished by our opponent, for your committee's careful consideration, pointing out: (*a*) That the Italian producer is offering manufactured stone cheaper than the raw material. (*b*) That the price on the raw material is regulated to secure the greatest market price that it will stand in competition with manufactured stone. (*c*) That the possibility of so regulating the prices as to approach what is commonly termed as "dumping" is in this case possible, because the Italian stone is mined by convict labor.

2. The question that naturally arises at this time is how can the American producer, even with a protective tariff of 1 cent a pound, hope to compete with the Italian stone, which can still be imported at a cheaper figure.

Answer. When we, along with the magnesite producers, the tungsten producers, the zinc producers, and the dye interests, first attempted to secure protection, our costs were estimated so as to place the American stone on a legitimately competitive basis with the Italian. At that time it had not developed that the greater part of the Italian stone is produced by convict labor, and that the market price could be regulated according to the margin afforded by this cheap production. We then anticipated that conditions would have a tendency to stabilize around our earlier figures.

As a result of our subsequent experiences, however, and speaking with all possible earnestness and frankness, we would feel justified in attempting to secure a tariff of 1½ cents per pound on all pumice stone provided this matter at present were coming up for consideration for the first time. Our hope under the present situation is that, with modern machinery, an intelligently trained working force and increased production we can reduce our costs to the point where we may enjoy at least a reasonable part of the market.

3. Mr. Goetz also states: "But the California producers yesterday said that their cost of landing the pumice stone in New York is higher than the importer's cost of the Italian material. Well, now, I am sure that this committee is going to consider why it is necessary to land this pumice stone in New York; I mean pumice stone from California. More than half of the pumice stone consumed in this country we consume west of and including Detroit. So that in citing a freight rate from California to New York you are certainly citing the highest possible freight rate that you can get in this country." The implied inference of this remark is, of course, perfectly obvious.

Answer. As producers we naturally ship to the point designated by the purchasers. The fact that all the mills for grinding the raw material are situated on the Atlantic seaboard immediately adjacent to New York City would naturally mean that the American stone is sent there for manufacture, and from these mills is again distributed throughout the more western markets. It is pointed out that these mills were originally so situated on account of their strategic position in reference to the Italian source of supply, and they were established and doing a permanent business long before the late war curtailed foreign imports, and thus offered an impetus to the American producers to develop a previously dormant national resource.

4. It is claimed that the American stone is not equal to the Italian. In substantiation to this claim, James H. Rhodes & Co. submit numerous letters.

Answer. We suggest that these letters were inspired by letters which James H. Rhodes & Co. sent out to their divers customers, and in which they alleged that the American miners were going "to attempt to put a bill through Congress providing for a prohibitive tariff on the importation of pumice stone sent from Italy for the purpose of forcing domestic pumice on the market in place of Italian." A careful consideration of the wording of these letters in question and the general similarity of their diction, when coupled with the writer's use of quotation marks, will, we believe, logically point to the above conclusion.

We have submitted letters bearing on the subject of comparative quality. It will be noticed that these letters are written by experts who, from the very nature of their positions, are entirely disinterested personally and who therefore might be considered competent to pass an unbiased opinion. The meat of their remarks is that the American pumice stone is about equal to the Italian. In this claim they are much more conservative than was Mr. Elmer R. Murphey, president of James H. Rhodes & Co., who, when controlling a western source of supply, petitioned the War Trade Board for an embargo on foreign pumice. From this letter we respectfully quote one paragraph without comment: "We handle 65 per cent of all the Italian pumice coming into this country, and were the first to cooperate heartily and adjust our source of supply to California. Upon the statement of the War Trade Board, we have invested $20,000, which will be a total loss if you allow this rule to stand. Furthermore, Italian pumice is not necessary, as the California goods are just as good in quality and a little cheaper."

5. Claim is made that an increase in tariff will entail great hardship on the consumer and correspondingly curtail revenues. Mr. Goetz states: "It will be seen, therefore, that the amount of pumice stone used in this country is rather limited and, therefore, as a revenue producer would not be of vital importance, though we believe that some duty should be assessed and thus create some revenue, but it should not exceed the amount recommended (65 cents per ton); otherwise it will cause a burden on the consumer in this country and possibly reduce the use of it to more than offset any additional revenue that could be obtained."

Answer. The use of pumice stone is such a small part of a manufacturing operation as to be practically negligible. We again quote Mr. Goetz: "I have had 15 years' experience in selling pumice stone. I know the purpose for which it is used, and you can not think of handling to a finisher of a Packard automobile, or any good automobile, a piece of California pumice stone, not unless you have a great big accident policy."

Pumice stone used for the finishing of fine painting and varnish work is ground or manufactured stone and not the raw lump. A survey of the actual shop practice in finishing automobiles shows that there is never as much as 2 pounds of pumice used per automobile even under the most wasteful circumstances. If the price of this pumice is raised 1 cent a pound to cover the duty asked for, the difference in the cost of producing an automobile, selling at from $500 to $5,000, would be less than 2 cents.

This same infinitesimal increase would apply to the corresponding use in other industries. The total importation of crude stone is slightly less than 11,000 tons a year, and this is sufficient to supply the demands of all the American industries. In other words, the stone is manufactured and distributed to the consumer in such small lots that its ultimate use becomes a matter of a comparatively few dollars over the period of a year.

If, as we hope, the increase in tariff will give the American producer an opportunity to secure, say, one-half the business, there will still be approximately 5,500 tons of crude Italian stone imported. With a tariff of 1 cent a pound this will mean an annual revenue to the Government of about $110,000 as against the present revenue of approximately $7,425. This revenue is calculated by taking the present rate of 5 per cent ad valorem on $13.50 a ton and multiplying by 11,000, the approximate number of tons imported per annum. The Government would receive in addition the war tax on domestic bills of lading amounting to 67.7 cents per ton, which is a higher revenue than they are now receiving from pumice stone under the present duty.

ROBERT LAUGHLIN.

SUPPLEMENTAL BRIEF OF JAMES H. RHODES & CO., CHICAGO, ILL.

Commenting upon the testimony of Mr. Laughlin representing Brand & Stevens, published in the hearings of January 10, before the Ways and Means Committee. These people have never been in the pumice grinding business, are misinformed, and we wish to correct some of their misstatements, as follows:

American production of pumice stone.—Mr. Laughlin is correct, for the American pumice mined has increased each year until it is now 30,000 tons a year, mostly in the Middle West.

The importation of Italian pumice in all forms has remained almost stationary during the past 10 years, except during the war, owing to transportation being difficult or prohibited.

Quality of American pumice.—In addition to Italian pumice we are large grinders of American pumice from the Middle West. This American pumice can be sold profitably for less than half the present sales price of Italian pumice.

The reason it is not favored by users even at this price is because it has not the hard abrasive quality and will not do the work of the Italian pumice. As Prof. Barbour says, this pumice is mainly used in scouring powders like Dutch Cleanser, soaps, laboratory work, etc.

We refer to the brief of Mr. Garlow, President of the National Silica & Pumice Co. and representing the largest production of American Pumice. He appeared before your committee in 1908 asking for almost the same protective duty as Brand & Stevens based upon similar theory to Brand & Stevens.

After 10 years' actual producing experience in the pumice business, Mr. Garlow now states in his brief that protection for American pumice is entirely unnecessary. Which shows the difference between the experience of Mr. Garlow and the theory of Brand & Stevens.

Brand & Stevens present letters stating that California pumice is as good in quality as Italian. The facts are these:

National Analine Co.: They do not use a pound of pumice in their chemical process, and, furthermore, analysis of pumice does not show its quality. Pumice stone is judged on the physical properties as an abrasive and not on chemical analysis.

The Oakley Chemical Co.: According to their own statement are a concern who do not sell or use pumice stone, but help their friends out in a friendly way with a general letter.

Ford Automobile Co., Philadelphia Branch: The standard Ford body is not rubbed with pumice at all, but dipped or sprayed, and the individual opinion of a man who does not use the goods is of small value.

Compared with the obliging statements of Brand & Stevens's friends, are a large number of letters from large users of pumice stone filed with the Ways and Means Committee, who testify that they used California pumice during the war by compulsion and found it much inferior, making their cost to manufacture higher, because, as the International Silver Co. said, it is only 50 per cent as efficient.

We have filed letters from the following: The International Silver Co., Meriden, Conn.; R. Wallace & Sons Manufacturing Co., Wallingford, Conn.; The Du Pont Co., Wilmington, Del.; Wm. A. Rogers (Ltd.), Niagara Falls, N. Y.; Fuchs & Land Manufacturing Co., New York, N. Y.; Gorham Manufacturing Co., Providence, R. I.; H. H. Franklin Manufacturing Co., Syracuse, N. Y.; American Hard Rubber Co., New York, N. Y.; and The Fiberloid Corporation, Indian Orchard, Mass.

The fact underlying this plea by the bankers, Brand & Stevens, for a tariff on pumice stone is this:

Mr. Laughlin was a prospector and discovered this pumice deposit. He put the matter before Brand & Stevens who are investment bankers, backed with statistics showing the consumption of pumice as being thousands of tons a year. In addition he pointed out that this pumice could be used as building material if mixed with cement, and the proposition looked feasible to Brand & Stevens, who proceeded to grub-stake Mr. Laughlin and pay for the development work on the claim until they had many thousands of dollars involved.

The use of pumice for building failed; then the war came along and Italian pumice was prohibited and they had an opportunity to sell but realized that there was no future for pumice stone when produced in so expensive a manner.

Their deposit is in the desert and only Mexicans will work there at a high wage and small production. They are in the extreme southwest corner of the United States, while the consumers' market is supplied largely from New York.

But these men having put their money into this proposition must have a tariff in order to get their investment out. In other words, this tariff is for the benefit of two men whose pumice will not do the work.

The net result will be that the Italian pumice will be imported any way even with the duty of 1 cent per pound, which must be passed on to the consumer, so that each consumer in the United States will be paying 25 per cent more for his pumice bills or 1 cent per pound.

Brand & Stevens' action in this matter is based upon misconception of the true value of their pumice stone.

Percentage of increase.—The present duty is about 65 cents per ton, so they ask for an increase of 3,000 per cent for their sole benefit, furthermore, there is no convict labor in Italian mines nor has there been since 1913.

Referring to the letter quoted where it was our opinion that California pumice was as good as Italian, we would call attention to the fact that this was written prior to the production in a large way, of California pumice, and based upon our opinion from laboratory tests.

However, the numerous protests of consumers of California pumice is beyond question the best evidence.

In case of war.—In case of war if Italian pumice is shut off, the California product can be put on the market within 60 days just as it was before.

We are satisfied that the pumice users in this country will look with great dissatisfaction upon an increase of 3,000 per cent in the tariff on pumice stone, which increases the price 25 per cent.

E. R. MURPHEY, *President.*

ATLANTIC COMB WORKS,
New York, February 8, 1921.

SIRS: We call your attention to the fact that parties owning some California deposits are trying to have placed a duty of 1 cent per pound upon imported pumice.

The question of an added duty on imported pumice stone is an important one to the celluloid industry, and of very great importance to ourselves.

In our experience of the last 14 years in this celluloid industry, during which time we have tried the California pumice and a great many other types of abrasives, foreign and domestic, we have found nothing that will give our product an extra fine finish, outside of the Italian pumice stone.

Inasmuch as the California pumice industry we believe is very small, employing in our opinion less than a couple of hundred people, we can see very little reason for the imposition of an increased duty on the foreign pumice stone of several thousand per cent. The only result of such an imposition would be an added cost to the consumers of our product in this country, as under any circumstances we would have to use the foreign material, and an added result might by the ability on the part of some of our foreign competitors to sell their merchandise in place of ours, either because of a superior finish, or of cheaper cost.

The foreign pumice is absolutely vital to a perfect finish on our celluloid merchandise. We urge your consideration in this matter.

LEO MARDER.

AMERICAN PIANO CO.,
New York, February 8, 1921.

SIRS: We would direct your attention to paragraph 75 of the tariff of 1913.

In this connection it has come to our attention that interests owning a deposit of pumice stone in southern California have recommended and are urging that a tariff of 1 cent per pound be levied upon the importation of pumice stones of all kinds.

Our industry is a very large consumer of pumice stone and satisfactory results have been obtained only through the use of American ground Italian pumice stone. In this connection we believe it is quite relevant to mention a period lasting about six months during the war, during which time it was impossible for us to purchase Italian pumice, which necessitated the use of southern California pumice stone, hereinafter referred to, and, although we understand in some industries that it proved out 50 per cent efficient, the experience in our factories was that it was not at all efficient; in fact, the situation became very critical in that the employees who were obliged to use it stated that if we could not obtain the Italian pumice they would be obliged to quit. This was at a time, of course, when employment was very easy, and it was only through our ability to locate small supplies from various sources locally that we were able to continue these departments.

We feel impelled to state that we believe, in view of the above facts, that the California interests are very selfish indeed and that if action on the part of the Ways and Means Committee imposes any such confiscatory tariff, which in round numbers increases the tariff from 67½ cents per ton to $20 per ton, that it would not only work a hardship, but would be an act which would make it impossible for the United States to manufacture a high-grade finished piano, and also would apply equally in the high-class furniture trade.

To accurately state our position we would be quite willing to support a tariff which would protect any or all industries in this country, providing the natural resources of this country would produce material of quality desired; however, owing to our experience with this self-same California pumice, we can not see any reason whatsoever for imposing an unjust duty on imported pumice stone, thereby imposing a hardship and a sacrifice in quality of American manufacture as a result.

We, however, trust that this protest may receive the consideration which in our opinion it deserves.

E. D. BULLON, *Purchasing Agent.*

AMERICAN HARD RUBBER CO.,
New York, N. Y., February 8, 1921.

SIRS: We would call your attention to paragraph 75 of the tariff of 1913.

We understand there is considerable agitation at present toward imposing a tariff of 1 cent per pound on imported pumice stone of all kinds.

We are large users of genuine Italian pumice and have tried out on numerous occasions the so-called domestic pumice, and after thorough, practical tests, have found it unsuited for our work, as it lacks the cutting and floating qualities.

If this tariff is imposed it will naturally have to be paid by the consumer, and we strongly urge you take action against same.

It is not fair to consider the American pumice as a substitute for the Italian, as the two are very dissimilar.

A. P. HOUSE, *Assistant Purchasing Agent.*

THE KOHLER INDUSTRIES,
New York, February 8, 1921.

COMMITTEE ON WAYS AND MEANS,
House Office Building, Washington, D. C.

SIRS: Owners of pumice stone deposits in California we understand are strongly seeking to bring their influence to bear upon the adoption of a tariff of 1 cent per pound on imported pumice stone of all kinds, the advisability of which is about to be considered by the legislature.

The piano industry as a whole is a large consumer of pumice stone and, therefore, feels obliged to voice its disapproval of the proposed tariff. The adoption of this proposed tariff if brought about will work an extreme hardship upon this industry which the writer represents and upon the country in general.

For quite a while it was impossible to secure imported Italian pumice stone and we were consequently forced to use a substitute. This substitute was purchased in the United States and came from California, and was known as California pumice stone. It was found decidedly unsatisfactory and until it was possible to again obtain the imported stock our troubles were endless. More time and labor were required to do the work performed by pumice stone and even with this increase the results obtained were not suitable. It did not seem possible for us to get the finish on our goods or a varnish surface that could be passed by our inspectors and at no time was it found to produce the same effect as the Italian imported stock. Its inefficiency was considerably below par.

We are informed that the producer of California pumice stone is striving to obtain as a tariff a change on unmanufactured lump pumice stone, the duty on which is now 5 per cent ad valorem and which figures 67½ cents per ton, to a new tariff or duty amounting to 1 cent per pound, or $20 per ton. This proposed increase represents about 3,000 per cent.

We think, even if the California producer succeeds in effecting the increase, we will still have to use Italian pumice stone. However, as is the natural procedure following high-priced stock consumption will be materially curtailed as a result. Then, again, a tax will be paid on a commodity which from experience we have found can not be duplicated anywhere in this country. The purpose of a duty or tariff is in some degree to protect our own industries and to foster the new ones. We are hearty advocates of protection where it can be obtained at a saving and for the benefit of our own country. In this particular case the country's natural resource offers nothing that proves itself by trial and experience to do the work and produce the results obtained by the imported commodity. Therefore the proposed tariff seems very unreasonable and should be buried.

We are quite confident that you will use all your efforts to discourage the proposal of the California pumice manufacturers, as you will upon close study arrive at a conclusion which is only natural and that is the injustice of placing a duty on a product not obtainable for the necessary purpose in our own country, an effect which is bound to add greatly to the already heavy burdened taxes, which are now being paid by the American manufacturers. May we enlist your support against what seems to us to be an unfair tariff?

J. F. MAHONY.

BRIEF OF R. J. WADDELL & CO., NEW YORK.

Unmanufactured pumice stone imported into this country for grinding should either be returned to the free list as formerly or entered at a very low specific duty of not over $1 per ton of 2,000 pounds.

Manufactured or ground pumice stone should either remain as at present with a duty of one-fourth cent per pound or increased to three-eighths cent per pound as formerly.

Mills for the grinding of Italian lump pumice stone were established in this country when grinding pumice stone was on the free list, and in order to offset the difference between the higher cost of manufacturing in this country and Italy all the margin is required between the grinding pumice stone being entered free of duty and the protection of one-fourth cent to three-eighths cent per pound on the pumice stone ground in Italy.

During the war, when pumice stone could not be imported from Italy, we were forced to grind the American pumice stone, but it was not as satisfactory to our customers, and most of them, as soon as the Italian pumice stone could be imported, immediatly required our grinding of the imported pumice stone, claiming that the American product was too dark in color for many purposes and did not stand up as well when required for abrasive purposes.

Grinding of pumice stone in this country is not a large industry. We employ in our factory about 35 men.

We estimate our cost of importing pumice stone for grinding at the present rate of duty, namely, 5 per cent, and present rate of freight. This makes our pumice stone for grinding cost us in our factory $26.67 per ton before we commence to do any work on it, and with the present cost of labor and fuel, also loss of weight in kiln drying, which is from 8 to 10 per cent, it costs us fully $35 per ton to put the pumice stone into marketable condition, which means about nine different grades of finenesses, suitable for different purposes.

The pumice stone ground in Italy can be imported into this country in bags at the present time from $23 to $25 per ton on dock—New York—duty paid.

We would suggest if any duty is to be placed upon unmanufactured pumice stone for grinding, that it be specific—so much per ton—rather than ad valorem, and this would do away with the annoyance, both to the United States customs authorities and to the importer, in determining the correct market price at time of shipment, and would give us specific duty on all kinds of pumice stone, which, to us, seems advisable.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

This material is imported from the Lipari Islands north of Sicily in the Mediterranean Sea. It is a vesicular rock of recognized abrasive qualities. Practically none of this type of pumice is produced in the United States, the latter's production in California, Utah, Kansas, and Nebraska (for a total of 27,708 short tons in 1915) being represented by a very different material, namely, a finely comminuted volcanic dust, of low value ($2.28 per short ton in 1915).

The United States are, therefore, dependent upon foreign supply for the real pumice stone, which divides into three grades: (1) The crude material as it comes from the mine and known as "pumice chips" or "pezzame," representing 80 per cent of the total exports to the United States; (2) Italian powdered pumice, a product of the local mills and regarded not quite as good as the American ground Italian pumice; (3) lump pumice, varying from the size of an apple to a much larger size, shipped in barrels and used chiefly by automobile and carriage manufacturers, marble workers, lithographers, platers, manufacturers of patent leather, enamel and toilet articles. Ground pumice is extensively used as a filler for paint, soap, and scouring, cleaning and polishing preparations.

Unmanufactured pumice stone is subject to a duty of 5 per cent, and partially or wholly manufactured (powdered) pumice stone to a rate of one-fourth of 1 cent per pound. Importations, which amounted in fiscal year 1914 to 7,528 tons of unmanufactured and 1,745 metric tons of ground pumice stone, were naturally interrupted by the war, which reduced them in fiscal year 1918 to 3,780 tons of unmanufactured pumice and stopped entirely the importations of ground pumice. They receovered, however, in calendar year 1919, with 5,234 tons of the unmanufactured material and 2,206 metric tons of the ground pumice.

Unmanufactured pumice stone, being a raw material necessary to American industry, and especially to the grinding of pumice in this country, and which does not compete

with any similar product of the United States, none being here produced, should be allowed to come in at as moderate a rate of duty as is consistent with the interests of the milling and other industries using this material and the requirements of revenue. To both these purposes the present rate of 5 per cent appears ample, especially when considering the greater difficulties now confronting this industry in comparison to prewar conditions. In this connection may be mentioned the great increase in the cost of labor, paid before the war from 2.50 to 3 lire, whereas wages are now 20 to 25 lire per day's work; the present trebled maritime freight of $9, against $3 per ton before the war, freight being perhaps next to labor the item of greatest importance in determining the cost of this material, and the cost of the material itself at the quarry which, from 4 lire per ton in prewar days, has now increased to 36 to 40 lire. So that the unmanufactured pumice, which could be laid down in New York before the war at about $12 per ton, costs now at least $18.

Powdered pumice stone is a necessary material to many industries in this country. The advantages of American manufacturers, through improved machinery and lesser cost of fuel and other materials, in turning out a superior article to the imported, enable them to get a much higher price for their article and to secure a wider patronage. This more than balances the higher cost of labor. The fact that importations of ground pumice have never developed to any extent, showing on the contrary an opposite tendency, prove that the pumice ground by American manufacturers with more improved mechanical means, not available abroad, and according to such standards as are required by American consumers and are better understood by millers in this country, has nothing to fear from the imported article, which could not stand any higher rate than the present.

This chamber, for the above stated reasons, respectfully recommends that the present rates of duty of 5 per cent on unmanufactured pumice stone, and of one-fourth of 1 cent per pound on wholly or partially manufactured pumice stone be continued as they are.

BRIEF OF NATIONAL SILICA & PUMICE CO., MEADE, KANS.

DEAR SIRS: We respectfully ask your consideration to the following statement by this company, who are large producers of American or domestic pumice.

The present tariff, covered by paragraph No. 75, reads as follows: "Pumice stone, manufactured, 5 per cent ad valorem; wholly or partially manufactured one-fourth cent per pound; manufactures of pumice stone, or of which pumice stone is he component material of chief value, not specially provided for in this section, 25 per cent ad valorem."

I appeared before the Ways and Means Committee in 1909 and at a time when the American pumice was being developed and asked for a tariff to protect the American material against the Italian pumice stone.

We have since 1909 shipped each year many thousand tons of American pumice, and, as we learned more about the pumice business we found the American material was not competitive to Italian pumice and is sold at a lower price than the Italian pumice.

Any additional duty on pumice stone imported from Italy would not be any assistance to this industry.

We are the second largest producers of American pumice in this country and believe the above statement is the usual sentiment of other producers of American pumice.

NEW YORK, *January 14, 1921.*

SIR: I submit herewith to your honorable committee data relative to duty on pumice stone, Schedule B, paragraph 75.

I protest against a higher duty for the following reasons:

Italian pumice stone is exported solely from the Island of Lipari, Italy.

Californian pumice has been thoroughly tried by users of pumice, but its quality is not satisfactory either when in the natural lump or in the ground form.

While the chemical nature of American pumice may be the same, under practical working conditions the Italian pumice is found to be much more efficient in its abrasive qualities. This makes it preferred to the domestic product and in most cases absolutely necessary for the purpose required.

The present rates of exchange are so adverse to the exporter that the cost of their pumice is lower now than it will be when exchange is higher.

CHARLES B. CHRYSTAL.

CHINA CLAY OR KAOLIN.

[Paragraph 76.]

HENDERSON INCHES, REPRESENTING JOHN RICHARDSON & CO., BOSTON, MASS.

Mr. INCHES. Mr. Chairman and gentlemen of the committee, I have a brief which I will file with the clerk, a petition against the increase of the duty on china clay or kaolin.

Our company in 1908 and again in 1913 submitted briefs to the Ways and Means Committee. In 1908 our brief was dismissed, and by the tariff act of 1913 the duty on china clay was made $1.25, which now stands. We are urging in this brief that there be no increase in the duty on English china clay. This material is used for the most part in this country in paper making and the second largest use is for pottery. There are a number of smaller ones which are not probably worth mentioning, such as filling for cotton cloth, and making ultramarine blue.

Mr. OLDFIELD. What was the second use?

Mr. INCHES. Pottery, sir.

Mr. OLDFIELD. Where do you get this clay?

Mr. INCHES. This clay comes from Cornwall, England.

Mr. HAWLEY. Have you any competing product in this country?

Mr. INCHES. In Georgia, North Carolina, and Pennsylvania. Those three States produce the greatest amount. There are a number of other States which produce it, but those three are the largest producers.

Mr. OLDFIELD. What did you say the duty was?

Mr. INCHES. It is $1.25 per ton.

Mr. OLDFIELD. What do you want it now?

Mr. INCHES. We are recommending that the duty be not increased.

You have asked about a competing product in the United States. There is a material called kaolin, or china clay, found in the United States, in the three States which I have mentioned. It is mined from what is known as sedimentary clay; that is to say, the clay is run from its original position into shallow lakes, and it loses its heavy mixture on the way, but gathers other impurities.

These other impurities give the clay more color, and that has been the principal difficulty with using it with paper. The fact that the clay is moved from its original position also affects its body.

Some of this clay can be used very well when it is mixed with English clay. They find it extremely difficult to use this American clay on account of its tendency to crack.

Mr. GARNER. You do not produce clay?

Mr. INCHES. We import clay. We have no interest in any mine.

Mr. GARNER. You do not use any American product?

Mr. INCHES. We are not brokers for it.

Mr. GARNER. How much clay is used under the head you speak of here?

Mr. INCHES. We estimate this year that 300,000 tons were brought in.

Mr. GARNER. How much has been imported?

Mr. INCHES. Three hundred thousand tons have been imported.

Mr. GARNER. I said, what was the yearly consumption of clay in the United States?

Mr. INCHES. I should say between 450,000 and 500,000 tons.

Mr. GARNER. How much is imported?

Mr. INCHES. About 300,000 tons were imported this last year; calendar year, not fiscal year.

Mr. GARNER. And you are a broker—you are an importer?

Mr. INCHES. Yes, sir; and other people import it also.

Mr. GARNER. I am sorry the chairman is not here, so that he might interrogate you regarding that.

Mr. DICKINSON. How much is used in this country?

Mr. INCHES. We estimate between 450,000 and 500,000 tons.

Mr. DICKINSON. Three hundred thousand tons are imported. Where do you get the rest from?

Mr. INCHES. It comes from Pennsylvania, South Carolina, and Georgia for the most part. There are some small quantities that come from other States. I have here in my brief an analysis, which presents a table of an average test of English clay and of a test of clay from two mines in South Carolina and one in North Carolina. It is something that you can not tell very much about from an analysis. I have some samples here if you want to look at them. I do not know whether you have the time or not.

Mr. GREEN. You say that the clay is very much alike.

Mr. INCHES. You can not tell whether it is good clay or not, from the analysis. You may have two clays that are almost the same, have almost the same chemical analysis, and one be enough whiter than the other to make it commercially valuable where the other could not find a market.

Mr. GREEN. You can show those samples to the committee, if you care. If that is all, we will call the next witness.

Mr. INCHES. I would like, if I may have the permission, I would like to say something more about the price of the two articles.

The English clay at the present time, f. o. b. Atlantic ports costs just about $15. At the present time the domestic clay is being sold at $9 to $10 a ton. The English clay is a sort of clay which must be used in high-grade coating of paper. There is no substitute known, which is shown by a statement of practically all of the book manufacturers made to the War Industries Board on March 27, 1918, when they were considering the proposition of placing an embargo upon clays. They went to that board and showed that domestic clays could not be used and that there was no substitute for English clay for high-grade bookwork and the War Industries Board did not put an embargo on clays.

Mr. TIMBERLAKE. What percentage of manufactured articles are manufactured out of imported clay?

Mr. INCHES. All that I can give is an estimate and that would be, I should think, about 70 per cent.

There is no way that I can tell, but I should think about 70 per cent of the clay that is used is imported.

Mr. TIMBERLAKE. What percentage of the paper is composed of clay, about 10 per cent.

Mr. INCHES. About 20 per cent, between 20 and 25 per cent. There is no way I can tell, of course.

Mr. TIMBERLAKE. What percentage of it goes into pottery?

Mr. INCHES. There is a smaller percentage than goes into paper. I wish to impress——

Mr. OLDFIELD (interposing). If the tariff should be raised to $2.50 a ton, would that cause any activity in the production in this country?

Mr. INCHES. I am not very familiar with whether it would cause any activity or not. Of course, I do not know anything about the mining of it.

Mr. GREEN. The American clay is not as good as the English clay?

Mr. INCHES. No, the English is very far superior to the domestic.

Mr. GARNER. We could not get along without the English clay?

Mr. INCHES. No, sir; we have got to have the English clay.

Mr. GARNER. If the tariff should be raised to twice what it is now the same amount of clay would come in?

Mr. INCHES. I am not prepared to say. I should say that the paper trade, which uses this fine clay in making paper, would have to use the clay.

Mr. GARNER. They would have to bring it in even if it cost twice what it is now; even if it were put at $2.50 instead of $1.25, which is the present duty?

Mr. INCHES. I think they would bring it in.

Mr. GARNER. Do you know whether or not your idea coincides with that of the producers of this clay in the Carolinas, Georgia, and Pennsylvania?

Mr. INCHES. I suppose not. I do not think it would do any good, no matter what duty was put on this clay. The domestic clay can not be used in making this high-grade paper. They have got to have the best material.

Mr. OLDFIELD. Why do they have to use it?

Mr. INCHES. Formerly paper was made of rags, which is now made of wood pulp. In order to fill up the surface you have got to use something, and this clay is the best thing that they can find.

Mr. OLDFIELD. You said that they use about 300,000 tons?

Mr. INCHES. We use about 450,000 to 500,000 tons.

In wall paper and low-grade books china clay is used as a filler. In high-grade book and magazine paper china clay is used both as a filler and as a finisher or coater. The superior grades of English clay alone satisfies the manufacturer of high-grade coated paper. They use the English clay in order to obtain a good product.

Mr. HADLEY. What about the American clay?

Mr. INCHES. There is not enough clay in this country to supply the paper trade.

BRIEF OF JOHN RICHARDSON CO., BOSTON, MASS.; PAPER MAKERS CHEMICAL CO., EASTON, PA.; JOHN W. HIGMAN CO., NEW YORK, N. Y.; MOREY & CO (INC.), CAMBRIDGE, MASS.; GEORGE KNOWLES & SON, TRENTON, N. J.; A. M. MEINCKE, CHICAGO, ILL.; L. A. SALOMON & BRO., NEW YORK, N. Y.

In 1908 and in 1913 the John Richardson Co. was represented at the hearings before the Ways and Means Committee and requested the removal of the duty on china clay, or kaolin. In 1908 the petition was dismissed and the duty of $2.50 per ton remained in force. By the tariff act of 1913, paragraph 76, the duty was reduced to $1.25 per ton, at which amount it now stands.

This brief recommends that there be no increase of the duty on china clay, or kaolin.

EXPLANATION OF TERMS.

The terms "china clay" and "kaolin" are synonymous. China clay, or kaolin, is a raw material chiefly used in the manufacture of paper and pottery. In this brief the term "china clay" will be used except with reference to North Carolina clay which is customarily called "kaolin."

China clay is decomposed granite. It is found in large quantities in Cornwall, England. A material differing in important respects in quality, but called by the same name, is found in the United States, principally in Georgia, South Carolina, and Pennsylvania. In both countries the term "china clay," or "kaolin," is applied to materials of varying qualities and commercial values.

About 90 per cent of all the clay imported into the United States is English china clay.

China clay is either residual or sedimentary.

Residual clays.—Beds of china clay occurring at or close to the place of original decomposition are known as residual clays. These clays in their natural state are mixed with a large quantity of feldspar, mica, and sand.

In the United States, so far as is known, there is practically no residual clay except in North Carolina. All English clays are residual.

Sedimentary clays.—In the erosion of the earth's surface, residual clay is washed down into lakes and seas. On its journey most of the feldspar, mica, and sand are dropped out and other impurities are added. It is deposited in the form of a sediment, and is known as sedimentary clay. Except for the North Carolina clay, the china clay in the United States is largely sedimentary.

The methods used to mine the English residual clay differ fundamentally from the methods used in mining the sedimentary clay of the United States.

The English method.—A stream of water under high pressure is directed from a hose against the side or stope of the bed, washing down clay, feldspar, mica, and sand. With each ton of clay that is washed down there are about 2 tons of sand and other materials. The heavier materials are settled out of the clay stream at the bottom of the pit, shoveled into cars, and hauled to the waste pile. The clay stream is pumped to the surface and run at decreasing rates of speed through drags, thus dropping out the finer impurities. The clay stream then runs to settling pits, most of the water is run off, and just enough left to convey the clay to the tanks from which it is trucked to the dries. After the drying process the clay is thrown into sheds ready for shipment.

The American method.—The clay is dug out of the face of the bank with hand tools or steam shovel.

In many instances after being assorted for color and dried in an open shed, the clay is ready for shipment. In other cases it is ground or pulverized and in some cases is washed with good results. (South Carolina Geological Survey, Series IV, Bull. No. 1, 1904, p. 62.)

The American method of breaking clay out of a deposit by hand tools or steam shovel is as unsuited to the conditions confronting the English miner as is the English process of extracting clay by means of a clay stream to the American miner.

We here present a table of an average test of English clay and of a test of clay from two mines in South Carolina and one in North Carolina:

	Medium English china clay.	Paper clay, South Carolina.	Paper clay, South Carolina.	North Carolina kaolin.
Silica	45.62	45.02	44.23	45.70
Alumina	38.98	38.98	38.92	40.61
Ferric oxide	.81	.77	2.31	1.30
Lime	.60	.....	.....	.45
Magnesia	.10	.07	Tr.	.09
Moisture	.....	.....	.....	.35
Ignition or total water	12.20	13.56	12.90	8.98
Alkalies	.50	.....	.....	2.82
Titanic oxide	.....	.85	1.21	.....
Zinc	.....	.03	.12	.....
Potash	.....	.26	.30	.....
Soda	.....	.55	.26	.....
	100.00	[1] 100.11	[1] 100.25	[2] 100.30

[1] South Carolina Geological Survey. [2] North Carolina Geological Survey.

"There are, however, many physical properties which the ultimate analysis does not explain, because they are dependent largely on the mineralogical composition." [1]

Two clays may show practically the same chemical analysis and one be enough whiter than the other to make it commercially valuable where the other could not find a market. The accompanying exhibits show clearly that there is a difference, for practical purposes, between English and American clay.

Exhibits A and B are samples of the deposits of English and American clay in a dry state.

Exhibit C shows 10 grains of ordinary English clay in a certain quantity of distilled water. Exhibit D shows 10 grains of high-grade domestic paper clay in the same condition. On shaking these bottles it is apparent that the English clay is held in suspension to a far greater degree than the domestic. This goes to show, first, that the English clay is finer in grain than the domestic; second, that it has less grit, or free silica.

Exhibits E and F, samples of English and domestic paper clay, respectively, further show that the domestic clay is harder, shorter, leaner, more yellow in color. The sample of English clay is better color, and is termed by the miners fat, long, or greasy,[2] and possesses a higher degree of plasticity than domestic. A clay of good color and high plasticity is desirable for paper making.

Uses.

By far the largest use of china clay is for paper-making. Forty years ago paper was made chiefly from rags and old paper. The manufacturer did not need china clay to give his paper a finish. Ground wood and sulphite, owing to their lower cost, now replace rags in most paper. China clay is used to fill and finish paper made from wood. Without clay the surface is harsh and not readily printable. China clay is now an absolute necessity for much of the paper made.

In wall-paper and low-grade book paper, china clay is used as a filler. In high-grade book and magazine paper china clay is used both as a filler and as a finisher or coater. The superior grades of English clay alone satisfy the manufacturer of high-grade coated papers. (See statement by paper manufacturers before War Industries Board, March 27, 1918, Appendix A.)

The second largest use of china clay is for the manufacture of pottery. The potter requires a clay that will burn white and will not crack or craze. English clays, owing to their uniformity and to their lack of tendency to crack or craze when burned, have been found to be more satisfactory for potting. Prof. Bleininger, United States Bureau of Standards, Pittsburgh office, has said: "The use of American clays in the production of white ware pottery is technically possible, but it is claimed by the potters that these clays can not be supplied in large enough quantity and of the required degree of uniformity to justify the shutting out entirely of the English clays. In our experience, irregularity in the quality of (American) clays has been met with frequently. The clay would differ quite decidedly in quality with different carloads although supplied by one firm."

In both countries as a general rule clays in certain pits are more suitable for pottery than for paper and vice versa. The North Carolina clays mentioned as being about the only known residual clays in the United States are used almost exclusively for pottery.

Clay is also used (1) as a stiffener mixed with size for cloth and other textile fabrics; (2) for the manufacture of sulphate of alum; (3) in the manufacture of ultramarine; (4) as an absorbent and stiffener in the manufacture of linoleum. For all these purposes English clay is considered superior.

The number of tons of English china clay imported into the United States and of domestic production of paper and pottery clays in each of the years 1909 to 1919 were as follows:

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[1] North Carolina Geological Survey, Bulletin No. 13, by Heinrich Ries, 1897, p. 30.
[2] Rudolph Wagner, Ph. D., professor of chemical technology at the University of Würzburg.

Year.	English imports.	Domestic production.	
		Paper clay.	Potting clay.
	Long tons.	*Short tons.*	*Short tons.*
1909	193,492.98	81,586	31,227
1910	231,234.45	85,949	34,231
1911	228,508.42	99,265	27,400
1912	[1] 37,365.78	119,857	25,852
1913	203,838.14	126,377	38,834
1914	241,935.99	116,328	34,191
1915	230,484.00	113,033	28,031
1916	228,936.00	153,434	47,728
1917	206,729.00	174,449	31,885
1918	192,705.00	141,725	37,909
1919	146,260.00	[2] 148,000	[2] 39,000
1920	[2] 300,000.00		

[1] English imports based on fiscal year, except 1920. Domestic production based on calendar year.
[2] Estimated.

The decrease of importations for the years 1918 and 1919 was caused by shortage of available ocean tonnage due to the allocation of tonnage for other purposes by the European Governments.

In the year 1920 such allocation was discontinued, with the result that the importation of English clay for the calendar year exceeded 300,000 tons. We are unable to obtain figures as to the production of domestic clays for 1920.

RELATIVE COSTS.

In each country there is a wide divergence between the cost of individual clays. Not only is the cost of the domestic kaolin, or potting clay, different from the cost of domestic paper clay, but also there are differences based on quality between the kaolins and paper clays coming from different pits. So, too, the prices of English filler clay and coating clay vary widely, the coating clay in many cases bringing a price half as much again as that brought by the filler clay.

However, certain average comparisons are possible. For the year 1918 the average cost at the mine of domestic paper clay was $7.54 per ton, while for the same year the foreign imported value of English china clay f. o. b. English port was $6.77.[1] To the cost of English clay at the English seaport must be added about 17s. for ocean freight and $1.25 for duty, which makes the cost at Atlantic port $15.13 per ton.

Since the compilation of the foregoing figures by the Government, the price of English clay f. o. b. seaport in England in English money has materially increased. This increase has been accompanied by a decrease in the value of the pound sterling. At the end of 1920 with exchange at $3.50 English coating clay at the American seaport cost about $20 to $21 and a low-grade English filler clay about $15.

The price of domestic paper clay rose between 1918 and the first half of 1920. Recent reductions in the price of this clay have brought the mine cost to between $9 and $10.

As exchange approaches normal the cost of English clay will be increased. On a basis of $4.86 to the pound sterling and present English prices, the cost of filler clay at Atlantic seaport would be about $20, and of English coating clay at Atlantic seaport about $27 to $28 per ton.

COMPETITION.

American clays do not compete with the best English clays used for best book and finished paper. The statement of the large paper manufacturers made before the War Industries Board, March 27, 1918, a copy of which is set forth in Appendix A of this brief, bears conclusive testimony to this fact.

Manufacturers of high-grade pottery are practically unanimously of the opinion that English clay is essential for good results. They find that American

[1] U. S. Geological Survey Mineral Resources, 1919, pt. 2.

kaolin with its different qualities can be mixed with English potting clays to good advantage.

SIZE OF DOMESTIC CLAY, PAPER, AND POTTING INDUSTRIES.

Although we have found no recent figures for the number of men employed and the amount of investment in domestic paper clay and kaolin, it is certain that the industry is relatively small as compared to the paper and potting industries.

We believe that considerably less than 1,000 men are employed in the domestic paper and potting clay industry. The paper industry, the chief user of china clay, is one of the largest industries of this country, both from the point of view of capital invested and labor employed. Add to this the potting industry of the United States, which is by no means inconsiderable in both respects, and the relative importance of the domestic clay industry is seen to be comparatively insignificant.

SUMMARY.

The duty on English china clay is now $1.25 per ton. We urge strongly that this duty should not be increased.

English china clay is essentially a different material than the American product called by the same name. It is a residual clay. American clay is largely sedimentary. English clay is mined by water process. American clay is dug out of the pit. Although in analysis English and American clays do not differ widely, analyses do not show their relative values for commercial purposes. Their essential differences are brought out by the exhibits presented herewith.

In the main, uses of English and American clays differ widely. Owing to their different properties American clays can not be substituted for English without damage to the product, be it paper or pottery.

Despite the shortage of ocean tonnage during the war and the great resultant opportunity for increase of domestic production, manufacturers of both paper and pottery have continued throughout to demand English clay. The importation of over 300,000 tons in 1920 is ample evidence of this demand. English clay costs more, and yet must still be used by both paper makers and potters.

The clays, in fact, are largely noncompetitive. An additional duty would be of small or doubtful value to the relatively small American clay industry. It would inevitably cause an enhancement of the price of the products of the great American paper and pottery industries, which we believe must continue to use English clay.

APPENDIX A.

Copy of memorandum of statement made at hearing before War Industries Board, Council National Defense, at Washington, D. C., March 27, 1918, on behalf of group of most of our largest book-paper manufacturers in regard to proposed embargo on importation of china clay:

"We earnestly hope that after careful considerations of the reasons given below, it will be found impossible to allow shipments of English china clay to continue as heretofore.

"(1) Domestic clays are not suitable as a complete substitute for English clay in book and printing papers. In the lower grades of book and printing paper a considerable percentage of American clay may be safely used. In the higher grades, however, the quality of the paper would be so seriously affected that the American clay can not safely be used, and absolutely can not be used in coated papers.

"(2) We do not believe that the development of southern clays is sufficient to provide for the needs of this country, without regard to car shortage, embargos, or labor difficulties.

"(3) The combined amount of domestic and foreign clays produced is required by the paper industry, without regard to other industries.

"(4) For the last year or more the railroad situation has resulted in largely reduced shipments from the South, and during the last few months the situation has become much more critical.

"(5) Under normal conditions, cars are a long time in transit to all points, and this is particularly true of New England.

"(6) A very considerable percentage of English clay is used in the mills located close to the Atlantic seaboard.

"(7) A large percentage of English clays have been brought into this country practically as ballast.

"(8) We can see but one argument for stopping the importation of English china clay, namely, to conserve shipping. As an answer to this, we would say that since the European war, steamers have been furnished for such service under permits by the English shipping board.

"(9) If English clay shipments are not permitted to be brought to the United States over an extended period, we predict a closing down during such period of the mills producing coated papers, as domestic clay positively can not be substituted to provide a satisfactory product, and the demands for such papers would cease. It should be borne in mind that coating machines can not be converted or utilized in any other form for the manufacture of paper, and that a large number of employees will be thrown out of work, resulting in hardship not only to them but to their employers.

"(10) If the importation of English clay is stopped entirely, it will mean that the paper makers of America will have less than 40 per cent of the clay they now use, and as clay is used mainly for two purposes, first, to give the finish necessary for the requirements of the printer, and secondly, to decrease the cost of the product, this will result in a hardship particularly on the consumers of periodicals and other book papers, as these classes of paper require the finish and softness which can be obtained only by the use of a considerable percentage of clay."

NOTE.—War Industries Board decided against proposed embargo.

ADOLPH H. SALOMON, OF L. A. SALOMON & BRO., NEW YORK CITY.

Mr. SALOMON. Adolph H. Salomon, of L. A. Salomon & Bro., New York, N. Y. I do not know that I can add anything to the statement that has been made by Mr. Inches with regard to china clay and its uses. He is a very much larger importer than ourselves, while we have been importers of china clay for possibly 30 or 40 years. I think he has pretty much explained the situation. There is only one thing which I think he overlooked, and that is that there is a very large amount of this clay used in pottery, and we ourselves do not import pottery clays, but Mr. Goldman, who is present here and representing the English Clay Sales Corporation, is better posted than myself with regard to that, and better qualified to testify as to that particular phase of the china-clay business.

Mr. OLDFIELD. This is pottery clay?

Mr. SALOMON. There are certain clays found in England that are pottery clays, and those clays are imported to a large extent into this country, and they are essential to the making of high-grade pottery. They are just as essential to the pottery industry as the high-grade English clays are to the paper makers. But we ourselves do not import pottery clay, but I think Mr. Goldman probably knows more about that than ourselves. We confine our business entirely to the paper-making clays.

We also handle domestic clays, but we are not producers, merely jobbers, and I am not familiar with the production of it.

Mr. HAWLEY. You concur in the former witness's statement that the American clays are not of as good quality as the English clays for certain purposes?

Mr. SALOMON. Absolutely. It is absolutely essential to have English clays. There is no substitute for that.

Mr. GARNER. And a duty of 20 per cent ad valorem would not be too high?

Mr. SALOMON. Yes; it certainly would.

Mr. GARNER. Why so?

Mr. SALOMON. Well, anything that you would add would increase the cost of the clays to the pottery users, and that would merely increase the cost of the product in which the clays are used. The manufacturer would naturally pass it on to the consumer.

Mr. GARNER. Certainly, you would pass it on to the consumer, but what would $3 a ton on clay passed on to the consumer amount to?

Mr. SALOMON. Twenty per cent ad valorem would amount to more than $3 a ton.

Mr. GARNER. Not according to the statement of this gentleman. He said it was worth $15 a ton, that that was the price.

Mr. SALOMON. That would be $4.15 a ton on $15 a ton.

Mr. GARNER. According to my calculation, it would be only $3 a ton.

Mr. SALOMAN. I think that if you put an ad valorem on clays you would make a very serious mistake, because the different qualities of clay are so hard to distinguish. That would cause no end of trouble, and put the Government to a great deal of extra expense in levying the duty.

Mr. GARNER. Quite so. You have got your price in there as $15.

Mr. SALOMON. Yes; but in examining the clays they are so much alike that there would constantly be controversy between the parties as to the real value of the clays and whether you had one clay or another.

The CHAIRMAN. Do I understand you to say there is no substitute whatever for the English clays?

Mr. SALOMON. No; there is no substitute for the English clay. I am not prepared to say that there is no substitute for some uses of that clay. The domestic clays are used to some extent in place of the English clays, but there is no way of displacing the English clays, and they can not be displaced entirely. We will have to import large quantities always, or until we have found a substitute in this country, which so far we have not been able to find.

Mr. GARNER. Do the claims of the producers in Pennsylvania, the Carolinas, and Georgia agree with your statement that there is no substitute for the English clays?

Mr. SALOMON. Well, as a matter of business I suppose that they do not.

Mr. GARNER. There is a difference of opinion, then, as to whether there is a substitute?

Mr. SALOMON. Naturally; that is natural.

Mr. GARNER. And, being an importer of the English clays, your opinion is there is no such?

Mr. SALOMON. We also deal in domestic clays, although we are not producers of domestic clays.

The CHAIRMAN. What is the value of the American clays?

Mr. SALOMON. Well, it is about $9 to $10 a ton, I should say offhand.

The CHAIRMAN. While the English clays are $15.

Mr. SALOMON. Yes.

Mr. HULL. Would you be willing to let the ad valorem tax be imposed and levied on the American price instead of the imported price on the English clays?

Mr. SALOMON. Well, I am not prepared to answer that question. I have not given it any thought; but I think that the cost of the commodity would not be the proper way of levying taxes on cheap materials of that kind, and a specific duty should be assured. I do not believe in an ad valorem tax on anything as far as it can be eliminated.

Mr. HAWLEY. What percentage of the best book paper is composed of this clay?

Mr. SALOMON. I think that Mr. Goldman can give you that information, as he is more familiar with that end of the business than I am.

SIGMUND GOLDMAN, REPRESENTING THE ENGLISH CHINA CLAYS SALES CORPORATION, NEW YORK CITY.

Mr. GOLDMAN. Mr. Chairman, I desire to file a brief with the clerk.

One of the things I desire to say is that I think that the import duty on clay should be upon a specific basis rather than upon an ad valorem basis.

In the last tariff bill it was $1.25 and prior to that it was $2.50. I would request that the tax be placed upon a specific basis rather than upon an ad valorem basis, because, as Mr. Salomon has already stated, it leads to an endless amount of trouble to ascertain the correct value, as it is hard to determine the qualities of the clays.

Two clays may appear to be exactly alike, but in actual work will be found to be entirely different and that could only be found out in actual work in the use of the clays.

Mr. GARNER. When you buy the clays they look alike, and you can not tell which is the better?

Mr. GOLDMAN. No.

Mr. GARNER. You could pay the same price, and they could impose upon you, and you would not know which was the better?

Mr. GOLDMAN. Exactly. You do not know what you are buying, from looking at the clays, as they are so much alike in appearance; and you might purchase them from a sample, and buy one clay, and when you went to work it up you would find that you had something else. It might appear to be the same quality of clay, but when you came to work it up you would find that it was not.

Mr. GARNER. Don't you usually have the American consul certify as to the value?

Mr. GOLDMAN. Yes.

Mr. GARNER. And there is not a great deal of controversy over that?

Mr. GOLDMAN. No.

Mr. GARNER. Why, then, do you anticipate you would have trouble with this?

Mr. GOLDMAN. Because, in the same line of trade that I am in, the wood-plup trade, there was an ad valorem tax on it, and afterwards

a specific tax was placed upon it. It was put upon a specific basis, and we had no end of trouble having shipments held up and were requested to furnish information as to the quality of pulp, because in appearance the pulp was exactly like some other wood-pulp sample out of an entirely different shipment made by a different mill by a different process.

Mr. GARNER. When you buy this clay in England, do you pay $11 for it?

Mr. HAWLEY. $15.

Mr. GARNER. Or $15, for all of it, or do you have various prices; do you not have various prices for different places in England, and different qualities of clay?

Mr. GOLDMAN. Yes, sir; there are different prices; we pay from $14 up to about $22 or $23 per ton.

Mr. GARNER. When you buy common clays in England you pay $14, and for better clays you pay $23. The rate of duty is not the same when the price is not the same. You are paying $1.25 a ton or $2.50 a ton for clay whether it is worth $14 a ton or $23 a ton?

Mr. GOLDMAN. No; the percentage is not the same.

Mr. OLDFIELD. The higher price clay pays less duty?

Mr. GOLDMAN. In percentage, yes.

The CHAIRMAN. Under the Payne-Aldrich law the duty ran from $1 to $3 a ton, and in the present law it is just one-half the rate that prevailed under the Payne law.

Mr. GOLDMAN. The china clays under the Payne law paid $2.50, Mr. Chairman; and under the present law paid $1.25.

Mr. HAWLEY. What percentage of this clay is there in high-grade book paper?

Mr. GOLDMAN. That would depend on the grade of the paper and whether it is surfaced coat paper, or whether a machine finished, or supercalendered machine finished. In supercalendered paper the clay enters into the composition of the paper. On the coated paper it is only on the surface of the paper.

Mr. HAWLEY. On the machine-made calendered paper what percentage of the weight of the paper would be clay?

Mr. GOLDMAN. In the supercalendered I should say anywhere from 15 to 20 per cent.

Mr. GARNER. In other words, with the clay costing $20 a ton in England, that would be a cent a pound, and 20 per cent of the paper being clay, that would be 20 per cent of its weight composed of clay. The value of the clay in that particular paper would be one-fifth of 1 cent per pound.

Mr. GOLDMAN. Yes; but when you speak of $20 a ton there must be added inland freights.

Mr. GARNER. Suppose it goes up from one-fifth of a cent to one-fourth of a cent. If the tariff were placed at $2.50 a ton, that would be a very small amount in the price of the paper to the consumer?

Mr. GOLDMAN. This extra charge would raise it more than a quarter of a cent a pound, because of the freight, the freight to the central freight rate territory, Ohio and Michigan, runs from 36½ to 40 cents per 100 pounds.

Mr. GREEN. Well, those are paid anywhere.

Mr. HAWLEY. What is the value of a pound of this paper, this supercalendered machine paper?

Mr. GOLDMAN. I do not know what the value is to-day, I am not a paper manufacturer.

Mr. TREADWAY. The question which my colleague is asking is one which should probably be asked of a paper maker?

Mr. GOLDMAN. Yes, sir.

Mr. GARNER. You are an importer of clay?

Mr. GOLDMAN. Yes, sir.

Mr. GARNER. And you want to pay just as little duty as possible?

Mr. GOLDMAN. Naturally.

BRIEF OF THE ENGLISH CHINA CLAYS SALES CORPORATION, AND HAMMILL & GILLESPIE, NEW YORK CITY.

SIR: The imports of English china clay into United States for the years 1910 to 1919, inclusive, were as follows:

Fiscal year June 30:	Tons.	Fiscal year June 30—Contd.	Tons.
1910	231,234	1915	230,484
1911	228,598	1916	228,986
1912	237,365	1917	206,729
1913	263,838	1918	192,705
1914	241,935	1919	146,260

The decrease in importations from 1914 to 1919, inclusive, was caused by difficulty in obtaining necessary tonnage, as well as a decreased production in England owing to shortage of labor, shortage of coal, also inland transportation difficulties; and the English industry is now only slowly recovering from these difficulties occasioned by the war.

The wages paid in the clay mines in England, taken at a normal rate of exchange for the pound sterling, for ordinary day workers is very nearly as high as that paid to the ordinary day laborers in the American southern clay mines, and as the process in producing a washed and dried English clay requires more time than the corresponding tonnage of southern American clays, and double the number of laborers per ton production, the cost per ton for labor in the English clay works is correspondingly higher than the cost per ton in the American mines.

At the present time the English ordinary day laborer in the clay industry is receiving 1s. 6d. per hour for a 7-hour day, that is, 63s. for a 42-hour week (about $15.80 in American currency). Piece workers, such as loaders and dry men are paid on a different scale and their wages are much higher than those of the day laborers, running from £4 to £5 per week ($19.50 to $24.25 in American currency), according to the tonnage handled. Labor cost represents about 50 per cent of the total cost of production, but the coal bill is also a heavy one, as English clays are obliged to go through a drying process in kilns, fed by coal fuel, for which only the best Welsh coal is suitable. The cost of this coal is extremely high at the present time. Compared with 1914, the increase in wages alone has been 150 per cent and the increase in the cost of coal for the English producer has been even greater.

As to the price at which English clays are marketed in this country, the following quotation is from the market report of the Paper Mill, dated New York, January 1, 1921, and will be of interest:

"The market for clays was more or less inactive during the past week, with trading confined to small purchases for immediate use. Prices held fairly steady. Available quotations follow:

"English clay, ex steamer, per long ton	$17.50 to $25.00
"Domestic clay, unwashed, per ton	7.00 to 8.00
"Domestic clay, washed, per ton	9.00 to 10.00"

At the present rate of exchange and low ocean freights the cheapest or commonest grade of English clay that can be used for paper making can not

be marketed at less than $14.50 to $15 per ton ex ship Atlantic seaboard, and to this, of course, must be added the inland railroad freight from seaboard to consuming mill, which to points in central freight traffic territory is as high or higher than clay can be shipped at from the southern mines to consuming mill. It is, however, generally conceded that the present low rate of sterling exchange is but a transitory feature and that very shortly sterling exchange will recover to about normal, so that the price of the lowest or common grade of English clay will be inevitably increased to approximately $18 per ton, thus leaving an even larger difference in price between the American and English clays.

A great many paper mills, as well as other consumers of English clay, are obliged to use, instead of the common grade of English china clay, a better grade of English clay, known as medium or best high-grade clays. At the present rate of exchange and ocean freight the medium grade English china clays are selling at $17.50 per ton and the best high-grade English china clays at $19.75 per ton, while with the rate of exchange at normal these prices would be advanced to $23.50 per ton and $26 per ton, respectively.

American clays and English clays are really not of the same character and utility, and any increase in duty would not increase the market for American clays, but would only add further burden on the consumer of English clays by increasing the cost of production of paper, pottery, etc. The English clays have always commanded a very much higher price than the American southern clays owing to superior quality and higher cost of production and expense in delivering the clay to American seaboard. It has been generally found that, although the American clays are selling at very much lower prices, consumers can not use the American clays to displace the English clays in producing an equal grade of manufactured article in paper, pottery, etc.

The largest consumers of English clays are the paper manufacturers, using about 70 to 75 per cent of the tonnage imported by this country. The balance, about 25 or 30 per cent of the importations, is consumed by potteries, linoleum, and cloth-filling trades, etc.

It is, therefore, not a question with the paper manufacturers, potteries, etc., of using domestic clays because they are very much lower in price, but a necessity for them to use English clays to produce their standard grade of papers, pottery, chinaware, etc., and any increase in the duty would consequently mean an increased cost of their raw material and therefore an increased cost of production and higher price to the consumer of paper, pottery, chinaware, etc.

We attach hereto letters from paper manufacturers expressing their views that no increase in the duty be made on English china clay, and we respectfully request that the committee give this matter their kind consideration and not make any advance in the duty on china clay.

S. GOLDMAN, *President.*
HAMMILL & GILLESPIE.

FITCHBURG, MASS., *December 30, 1920.*

GENTLEMEN: At Mr. Holbrook's request we are writing herewith to give you our ideas concerning the proposed imposition of a much higher import tariff on English china clays.

We feel that such a tariff would be a grave mistake. It would not give the domestic producers any protection, as paper makers who are now using English clay are not doing so because of any differential in price, but because of the fact that domestic clay is not as dependable and does not in any way take the place of English clay.

Any imposition of a higher tariff on English clay will simply go to increase the cost of paper to the consumers, as the mills now using English clay will continue to use English clay, simply passing the extra cost of tariff along to the consumer of paper.

We trust that your efforts to prevent the raising of the tariff will be with success.

CROCKER BURBANK & CO.

FITCHBURG PAPER CO.,
Fitchburg, Mass., December 31, 1920.

GENTLEMEN: It has been brought to our attention that there is agitation for increase in import duty on English china clay, and we trust you will use every endeavor to prevent any change at this time.

We use English china clays almost exclusively, for the reason that none of the domestic clays are of character and quality suitable for the classes of papers we manufacture.

Any increase in the duty would be a serious hardship not only to our company, but we believe to the other companies making book papers or similar grades.

We trust you will appear at hearings in opposition to any increase, and we would ask you to record our company in opposition.

GEO. R. WALLACE, *President.*

WHITMORE MANUFACTURING CO.,
Holyoke, Mass., December 29, 1920.

GENTLEMEN: In reply to your letter of the 20th will say that we are very much interested in the tariff bill to be taken up at the next special session of Congress. We are opposed to any tariff on English clay, and we certainly are quite sure we would be unable to use domestic clay for our requirements. If you think it advisable for our concern to have representation at the hearing at Washington on January 10 and 11, we will be very glad to send some one. And, in the meantime we are taking up the matter with the treasurer of the American Paper & Pulp Association to see what steps he has taken.

GEO. WEBSTER, *Assistant Treasurer.*

BRYANT PAPER CO.,
Kalamazoo, Mich., January 3, 1921.

GENTLEMEN: In reply to your favor of the 23d ultimo we wish to state that the mills in the Kalamazoo Valley had a meeting relative to the tariff on china clay, and it was decided to write Mr. Fordney letters objecting to the advance.

We are inclosing herewith a copy of our letter to Mr. Fordney.

FELIX PAGENSTECHER, *Assistant Manager.*

[Inclosure.]

JANUARY 3, 1921.

DEAR SIR: As we will not be personally represented at the hearings in Washington relative to tariff on English china clay, we wish to submit our views on the subject for your consideration.

We are large consumers of this material, using 12,000 tons per year, and we are one of the five Michigan corporations who use English china clay.

There is no domestic clay of equal quality on the market, and we therefore could not use it without lowering our standard of quality.

Conditions in the paper business are now highly competitive both as to price and quality, and German papers, as good or better than ours, are being offered in this market at prices much lower than we can meet.

These facts can be easily substantiated by the committee, and we therefore urge you to carefully consider this item.

Any additional cost would increase the difficulty of meeting foreign competition, and the great difference between foreign and domestic prices will be shown when the tariff schedules on paper are discussed.

We realize the necessity of advancing the tariff schedules generally, but trust that it will not be necessary to increase the duty on items that we need and do not produce ourselves.

BRYANT PAPER CO.

SUPPLEMENTAL BRIEF OF THE ENGLISH CHINA CLAYS SALES CORPORATION AND HAMMILL & GILLESPIE, NEW YORK CITY.

Supplementary to our brief, already filed with the committee, we desire to refute some of the statements made by the domestic producers of clay in their oral testimony before the committee, as well as in their briefs, which are not warranted by facts and figures.

1. The average sales price of English china clay is not $14.65 ex-vessel Atlantic seaboard, but ranges at present rate of sterling exchange from $14.50 to $20 per ton; and with sterling exchange at normal, which will no doubt be almost realized before the new tariff act is in force, prices would then range from $18 to $26 per ton ex-vessel Atlantic seaboard.

2. Various allegations were made by witnesses to your committee charging English producers with "dumping" clay in the American market, the inference being that this would enable the English producers to get rid of their surplus production in the United States, thus enabling them to keep up the prices for their home markets. English china clay is not being "dumped" into the American market by the English producers at less than cost of production. As a matter of fact, as pointed out by the domestic producers in their evidence, the minimum prices at which English clay can be sold in all markets—European as well as American and Asiatic—are fixed by an association of the producers in England and the minimum price for export to the United States and all other markets is precisely the same as the prices for clay to the English and continental consumers.

Your committee has been informed of the amalgamation of three of the largest English producers, and the implied object of this amalgamation, according to the brief filed with you by the domestic producers, is an aggressive attempt on the part of English capital to displace the American and other domestic clay products. We would, however, point out to your committee that the English industry has had a very bad time during the war and this amalgamation as well as other protective measures were necessary in order to enable the English industry to survive. The English industry not only had a difficult time during the war period, but since the cessation of hostilities the transport situation in England has greatly hampered the recovery of the industry. Moreover, the English producer is financially not able to stand the strain of such a reckless policy of selling under the cost of production, as some of the witnesses would have led an outside observer to believe from the evidence which they have presented to your committee.

3. One of the witnesses on behalf of the American domestic industry informed your committee that English producers were planning to dump 500,000 tons into the United States over the first six months of 1921. This statement is mischievous and the witness in question could have had no foundation in fact for his statement. A consideration of the total production of English clay will soon prove the fallacy of his statement. The English clay industry produces annually under normal conditions nearly 1,000,000 tons of clay and as the industry during the war period was reduced to about one-third production, and is only now slowly recovering, it would not be either possible or probable that 500,000 tons could be shipped to the United States in the first six months of 1921, as stated by the domestic clay producer. The maximum quantity of production must not alone supply the home demands but also the export demand for other countries in Europe, South America, Asia, and Australia, and the greatest quantity shipped in any one year to the United States has not exceeded 300,000 tons. The committee can therefore readily see that the domestic clay producer has been ridiculously careless in the handling of the possible export figures of clay to the United States for the first six months of 1921.

4. The domestic clay producers have not thought it advisable to state frankly to the committee that the inactivity of the southern clay mines is caused by the general business depression and the closing down of the paper mills, who are the main consumers of domestic and English clay. Importers of English clay are suffering just as much at present as the domestic producers from lack of orders and want of shipping instructions on orders placed some months ago, and the English producers, too, have greatly curtailed their output.

5. The domestic clay producers are in error when they state that labor and cost of coal are now only half or less in English clay works than they are in the United States. English common labor in the clay works are being paid 1 shilling 6 pence per hour, which on basis of normal rate of exchange would be about 36 cents per hour, or on the basis of rate of exchange of to-day would be about 29 cents per hour, and the common laborer in the domestic clay

works, as admitted to one of the signatories of this petition by a domestic clay producer, are now being paid from 25 cents to 30 cents per hour. Skilled labor in the English clay works, as well as in the domestic clay works, are certainly receiving higher wages, but both are on about an equal level.

6. It was also stated by one of the domestic producers that the domestic clay industry (and we suppose he meant the works producing kaolin or china clay for paper, pottery, linoleum, and kindred consumers) employed from 7,000 to 10,000 men, which we believe shows the same careless handling of figures and ciphers as already pointed out above in another paragraph. The English clay industry producing 900,000 to 1,000,000 tons per annum employs at the outside about 6,000 to 7,000 men, and as the domestic clay production is only about 300,000 to 400,000 tons, and as the process and labor employed in the English clay works requires more labor than the domestic, it can be readily adduced that something has gone wrong with the statement made that 7,000 to 10,000 men are employed in the domestic works.

7. English clay is by nature superior in quality and color to the domestic clay. It is a well-known fact that numerous experiments have been made to improve the quality and color of domestic clays, but all processes so far tried out have been abandoned and discarded as not being able to perform the miracle, as "one can not make a silk purse out of a sow's ear."

8. Domestic crude clay prior to the war was selling at prices from $3.75 to $4.25 per ton f. o. b. mine, and domestic washed clay at $4.75 to $5.50 per ton f. o. b. mine. The present prices range from $7 to $7.50 f. o. b. mine for the crude clay and $9 to $11 for the washed clays. According to figures furnished by one of the domestic producers, the present cost of production with present high labor and coal is $4.50 to $5 for crude clay and $6 to $6.50 for washed clay, which leaves a nice profit for the domestic producer, and not a loss, as stated by the domestic clay producers appearing before your committee. The clay works from which we are quoting above figures produces and ships about 18,000 tons per year, and employs about 35 to 40 men in their works, so that it can be readily calculated by the committee that the statement of 7,000 to 10,000 men being employed to produce 350,000 to 400,000 tons is greatly exaggerated. A fair estimate of the number of men employed in the domestic mines would be about 1,000 to 1,200 men. The domestic clay producers have not said anything about the production of pulverized or bolted clay, which at present forms a large percentage of the domestic clay production in South Carolina, Virginia, and Pennsylvania, and which, while somewhat more expensive to produce, sells at $18 to $20 per ton f. o. b. mine, and is used not alone by paper mills and potteries, but also largely by paint and rubber tire manufacturers. There is no competition in pulverized clay from England, and the domestic producers have this field all to themselves.

9. All the domestic producers take a point for comparison on freight the farthest possible point of delivery from mines in the South to the paper mills situated in Maine, where the ocean port of delivery is Portland, Me., and where there are only three consumers of clay, but they do not dwell upon the freight rate from the South to points in Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, and Missouri, where the bulk of clay is consumed by paper mills and potteries and where the freight rates are considerably less than on English clay shipped from the Atlantic seaboard. Nor do the domestic producers in their brief quote freight rates from domestic mines in Virginia, Pennsylvania, and New Jersey to points in those States, nor to New England points, where they would necessarily be much lower than from Georgia, Florida, and South Carolina. The table of rates, therefore, prepared by Mr. Ross is not complete and is misleading. We desire to point out to the committee, however, that at the present rate of duty and with the low exchange figured by Mr. Ross on English clay, that the domestic producer can undersell the English clay importer to points in Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, and Missouri and leave a profit for the producer, which will be enhanced as English exchange rates advance and domestic production costs recede in the near future.

10. We desire to point out further to the committee that Mr. Ross, in stating the price of English clay at $14.65 seaboard as an average price, has based his figures, as he admits, at rate of exchange of $3.40, while the rate of exchange at present is $3.76 and is still advancing, and in addition he has based these figures on the English wholesale or producers' price, to which must be added the American importers' profit of at least 10 per cent.

R. T. VANDERBILT, REPRESENTING THE R. T. VANDERBILT CO., NEW YORK CITY.

Mr. VANDERBILT. I represent the R. T. Vanderbilt Co., which is a selling organization, largely, selling American clays. The subject is clay, paragraph 76.

We are largely interested in the production and selling of American white clays or kaolin, our clays being prepared particularly for paper filling, but being supplied also for a number of other uses. At present we and our associates, whom we represent, have a considerable interest in American mines, and we expect to increase our investment and our production of American clays considerably if the industry is given the tariff protection we believe it deserves.

Doubtless the committee has all data regarding import tonnage, duties collected, and the growth of the American production. The following are the general facts [reading]:

1. Under normal manufacturing conditions the United States should at present consume annually about 550,000 short tons of white clay and kaolin, of which about 350,000 tons would be imported from England and 200,000 tons produced here.

2. The present import duty is $1.25 per ton of 2,240 pounds, as against a rate of $2.50 per ton in the Dingley tariff, and due partly to the increased value of clay the ad valorem basis has fallen from over 35 per cent in 1910 to about 10 per cent in 1920.

3. American production, with the aid paticularly of recent war conditions, has in the past 12 or 15 years grown from about 100,000 tons to 200,000 tons. This growth it is our desire to continue, but it is doubtful if the position can be even held without adequate stariff protection.

To take up these points in order: First. The American poduct has had a very difficult task in gradually building up its market to the point where it now has some 35 per cent of the consumption. The prejudice against a new and somewhat different product has had to be overcome. It is now established in certain work, but in the majority of cases is in constant competition with the imported clays, and without proper protection, both in duty and freight rates, a large part of this development could easily be lost. A large part of our production and probably 60 per cent of the total consumption of white clay is used in paper. In many grades of book and magazine paper clay forms from 20 to 30 per cent of the raw material used. The next largest use is for pottery; others being in paint, textiles, oilcloth, etc.

Second. Doubtless the clay duty established in the new tariff will be largely determined by the general policy adopted as to revenue or protection. We understand the first consideration is to increase the import revenue obtained by our Government. Figuring on this basis, it seems to us that an increase from $1.25 to the old $2.50 basis could be absorbed without an increase in the market price of clay, yielding double the present revenue. When the rate was reduced in the last tariff, it was not believed that the consumers would see a corresponding reduction in their prices, but because of the war conditions which followed promptly, the point was not definitely determined. At present prices of imported clays are comparatively high, and the profits per ton of the foreign producers are understood to be equally high, and we think that a small increase of this sort would be absorbed by them eventually.

During the war production abroad was centralized in the hands of a clay association formed with the purpose of securing larger profits by limiting production to fit the demand and by grading clays and establishing standard prices for each grade. Such combinations are not legal here. The only check the American consumer has against high prices is the production of the American miner. There are only English and American clays on the market here, and no other competition. During the war there have also been various amalgamations of foreign producing companies, and the output is now more controlled and the competition less than ever before. It is to the interest of the clay users to maintain the domestic industry in a strong position.

The fact that the old rate of $2.50 figured out an ad valorem basis of 35 per cent, while under present prices the new duty is only about 10 per cent, should

be considered. Instead of the duty being cut in half as intended, it is now less than one-third of the old rate. This is not even an adequate revenue basis.

At present even a duty of $2.50 per ton would be more than offset by the saving of $1.25 per pound sterling due to the low rate of exchange. At an average cost of clay and freight (it is imported largely in English vessels) of 80 shillings, the exchange differential is about $5 per ton, of which $1.25 is paid in duty, leaving a net advantage of $3.75 per ton for our mines to contend against. Under to-day's conditions, instead of starting out with an advantage of $1.25 per ton, we are at a disadvantage of $3.75. While exchange rates may advance, it is improbable that they will go back to normal for some years to come.

If the committee is willing to extend to the clay industry, which is still a young industry, some degree of protection, we would suggest a rate of from $4 to $5 per ton. This would mean a higher price for clay than under a $2.50 tariff. Imports we would expect to see somewhat curtailed and replaced by American grades, but the import revenue would probably not be lessened for some years. Also, if clay is made by American producers at a profit, the Government secures part of such profits through the income tax, whereas if these profits are made by foreign companies it does not share in them. The Government is now a partner in every industry.

The recent increase in freight rates applies in many cases more heavily against the long railroad hauls on American clays than against the shorter inland hauls on imported clays, which are landed at various ports. This is a new factor which needs to be equalized, as clay is imported at almost ballast rates.

Third. It has proven that some of the business developed during the war has been only temporary, particularly some consumption in the eastern seaboard States, where, because of high railroad rates, the American clays can not be delivered as cheaply as imported clay. This question of freight rates is something which must be taken up by the producers through the proper channels, but any considerable reduction is improbable. Clay can be carried from the mines abroad to many inland cities here at a lower freight rate for the whole movement than it can be shipped for from the South to the same points.

In regard to the quality of American clays, it was formerly claimed that they could not be used for work in which they have been successfully used during the past few years. Also there have been new grades developed. For instance, our mine in Virginia has been producing for a year and a half a clay equal in color and in working qualities to all but the "best" imported grades, and better than the "common" grades. The supply there is unlimited, and the production can be developed quickly to meet practically any demands. The Government experts, after exhaustive tests, have stated that the Georgia clays, after a chemical treatment, can be made to replace a large part of the foreign pottery clays. They state particularly that the treated clays would make better and whiter tiles than the present imported clays. If you will help to put the industry on a more profitable basis, the necessary treating plants will doubtless be developed.

The profits made by American producers have never been large, and few mines are now yielding an adequate return. There are extensive deposits of white clay in this country awaiting development, and the placing of a protective duty on clay would be the encouragement needed. The prospect of profitable operation under present conditions is not bright, but if the suggested duty is applied to imports, the present mines could be operated on a more efficient basis. Also we and our associates would expect to do our part in developing the industry and have, in fact, plans already made to develop new properties we now own to meet the trade requirements under such conditions.

Mr. HADLEY. Mr. Chairman, before adjourning, I would like to incorporate a telegram under the schedule "fire brick." I have a telegram from Denny-Renton Clay & Coal Co., setting forth certain specific objections that they desire the committee to consider and suggesting rates of duty.

SEATTLE, WASH., *January 8, 1921.*

We respectfully ask you to use your best efforts to secure customs tariff of at least 25 per cent ad valorem on fire brick imported into United States. A large part of fire brick used on north Pacific coast is imported from Canada under present tariff duty of 10 per cent. Lower labor and coal costs in British

Columbia permit manufacturers there to take the business from Washington manufacturers under present low tariff. Unless refractories manufacturers in this State can get the protection asked for the business will continue to go to Canadian manufacturers. Canada imposes tariff of 22½ per cent ad valorem on fire brick imported into that country.

DENNY-RENTON CLAY & COAL CO.

M. A. EDGAR, REPRESENTING THE EDGAR BROS. CO. AND THE GEORGIA CLAY PRODUCERS' ASSOCIATION.

Mr. EDGAR. I represent the Georgia clay producers. I am also president of Edgar Bros. Co., and I am appearing as an officer of that company as well as a member of the Georgia Clay Producers' Association.

Mr. Chairman and gentlemen, in the first place let me say that we are largely interested from a tariff standpoint—the Georgia clay producers—in what is known as paper clays, which is used largely as paper filler by the paper manufacturers.

I want to say that during the conditions which prevailed during the war all the producers of American material of this kind were invited to come to Washington, and they selected me to present the case to the Council of National Defense. They wanted to ascertain whether or not it was possible for us to supply the entire demand, so as to conserve ships used in the transportation of English clay for war purposes.

I think the conditions during the war demonstrated to every thinking man that it is a poor policy for us to depend upon supplies and the importation of materials into this country which we are able to supply ourselves.

Now, with regard to the matter of capital, Edgar Bros., after deducting $45,486.51 for depreciation and depletion on materials being removed, still have a capital of $211,213.75 invested in Georgia.

In Florida we still have, after deducting $22,000 for depletion and depreciation, we have $127,509.40 invested, in the Lake County, the Edgar Bros. Kaolin Co., of which I am vice president, has after deducting $115,000 for depreciation and depletion, still have a capital of $185,909.62 invested in the production of American material.

During the war we had all of the business that the Government would let us do.

At this meeting I mentioned, which I went before, the War Industries Board, we stated very conservatively that one-third of our capacity was paralyzed because the administration would not allow us to get the necessary labor.

And then last year when the coal bandits held us up we were almost paralyzed again.

To-day we are confronted with the fact that the Government through its means of revenue has done everything that it could, through the need for revenue for the railroads; they helped the railroad out in increased freight rates. The freight rates on our product from our plant to the mills at Portland at the present time is $9.06.

The ocean freight rate on the English product, from the Atlantic port to Portland, is just about one-half that amount.

Now, gentlemen, when you come to figure that the general cost of labor, the average cost of English labor, so I am informed—I do

not have absolute knowledge—is about one-half of ours, you will see what we are up against. Just a short time ago we had an offer from a firm in Maine in which the gentleman offered to contract to buy their 1921 supply from us if we would meet the English prices. That was the condition that we had to meet, the English prices, English conditions.

We have already lost about 60 per cent of our normal business for 1921 because of these conditions.

Mr. TREADWAY. How far apart were you on that proposition?

Mr. EDGAR. It was just simply impossible to entertain it at all.

Mr. TREADWAY. Did they give you the English figures; did F. D. Warren give you the English figures?

Mr. EDGAR. We have the English figures in our brief, showing all of the English figures, so you gentlemen will have an opportunity to get all of that data from the brief, and I believe each of you have a copy of the brief. We have compared those figures.

Mr. TREADWAY. That is what I was interested in. When it came to securing that contract, you lost?

Mr. EDGAR. Yes, sir; we were not anywhere near together. We just could not possibly do it. We have supplied them for years with a large part, I say a large part, a considerable part, of their requirements, and they said that they would give us a contract if we would meet the English conditions. They said they wanted to give us an even break. But we could not do the business under those conditions.

Mr. HADLEY. In the days before the railroad rates were advanced, and before the present tariff rate was cut, what was the situation under the prior tariff act as compared with the present law? Was your company in business prior to the enactment of the Underwood law?

Mr. EDGAR. Yes.

Mr. HADLEY. Now, when those rates were cut in two, was there any appreciable difference between August, 1913, and August 1, 1914, when the war in Europe began?

Mr. EDGAR. I can not give you that information because I do not have the data before me. Our business has steadily increased. We began operation in 1909, and like any other business it has to be worked up, and our business increased gradually, until, for example, the war broke out, when the West Virginia Pulp & Paper Co., who were taking 1,500 tons a month from us, came to us and said, "Gentlemen, can you give us 3,000 tons? We can not get it any place and we must have something or shut up our mills." I said we would be pleased to do so, and we were able to furnish them with that additional supply as we had ample facilities.

Now, gentlemen, I am only one of a large number of people who have put their money into this interest and with me it is a life work. I am over 70 years old, and I have been in this business for 50 years.

Mr. HAWLEY. Mr. Edgar, a previous witness testified that the manufacturers of certain high-grade paper claimed that American clays were not satisfactory and that they had to use English clays. Is that true; do you agree with that?

Mr. EDGAR. Not altogether. They do find for coating purposes certain clays produced in England, which they claim they prefer for two reasons. In the first place, it is very white clay; and in the

second place, nearly every mill superintendent—I will not say every one, but a large number of them are Scotch-Irish people and they are accustomed to handling English clays.

In addition to that many of the beaters for beating the clay have been installed and were adapted to handling English clays, and they use the English clay for filling.

Mr. TREADWAY. Clay is not used in all paper is it; in the high-class paper they do not use clay, do they?

Mr. EDGAR. That is my understanding.

Mr. TREADWAY. On the high-grade writing paper?

Mr. EDGAR. I think so, beyond question. I do not know whether any good paper can be made without clay.

Mr. GARNER. Mr. Edgar, your trouble seems to be with the freight rate. If you had, for instance, a freight rate to Portland, Me., of one-third what it is now from your place of business in Pennsylvania, or Georgia, you could sell those people the clay?

Mr. EDGAR. If we had that and we had the same English labor situation—had to pay the same prices for labor—then it would work very nicely. You have got to do one or the other, take it out of the roads or take it out of the labor, or quit business.

Mr. GARNER. In other words, your business can not compete with the English product being offered in America?

Mr. EDGAR. Well, I have stated the facts. I will leave it for you to draw your own conclusions. The facts are that the freight rates have doubled and the labor has doubled; and take, for instance, Portland, Me. Their freight rate to Portland, Me., is 15 shillings. Frequently this has happened recently—that they will send cargoes over here not consigned, and then call on the consumer and tell him that they have got this quantity of clay and that they have got to unload it and ask him what he will give them for it. So there is no stability for our market.

Now, I believe that the manufacturers would rather have our material, for the reason that they can get it in carload lots and are not obliged to take a whole cargo. Then they have to make money in their business, and when it comes to a large financial difference, what can you expect? They offered me at least an even break. That is all they can do.

Mr. HAWLEY. Do you know whether or not they are selling that clay here below the cost of production in England?

Mr. EDGAR. I can not say. You know those figures are very difficult to get.

Mr. BACHARACH. They are probably selling under the cost of production; at any rate, they are selling under your figures.

Mr. EDGAR. They are selling for whatever figure they may be able to get in order to get business.

Mr. BACHARACH. Certainly.

Mr. EDGAR. I submit, gentlemen, that so far as the United States is concerned, with a high protective tariff it is a game of heads we win and tails the other fellow loses, because if you put on a high tariff and when foreign importations come in we get the additional revenue, and when they do not come in, from the American business in the country you get income taxes, so you win both ways.

Mr. BACHARACH. That latter proposition is one of heads we win.

Mr. EDGAR. Yes, sir.

The CHAIRMAN. What proportion of your total cost value of raw material is in the ground?

Mr. EDGAR. A very small proportion.

The CHAIRMAN. The great proportion of your cost is labor?

Mr. EDGAR. Our cost of production and labor varies all of the way from $7 to $10, and when the coal barons held us up our rate went up to $11. Of course, you can readily understand that the cost varies in proportion to the amount of covering. Where you have this clay out here on a hill where the stripping is light, the cost is very much less than when you get in where you have very much more.

I want to say to you, gentlemen, to give you an idea in regard to our methods, this clay all has to be dug, taken to the mill, and ground in water, run into settling vats and the water drawn off; then it has to be pumped from the vats, and then it has to be dried by the steam pipes and, as I said before, it takes labor all the way through.

Mr. TREADWAY. Is this affected by the present exchange rates?

Mr. EDGAR. I do not think so.

Mr. TREADWAY. You are simply out, anyway?

Mr. EDGAR. Now, of the three plants in Georgia two have closed down simply because they did not have any orders.

MAURICE W. PHILLIPS, PRESIDENT OF THE PHILADELPHIA CLAY CO., PHILADELPHIA, PA.

Mr. PHILLIPS. Mr. Chairman, I am going to make a short story. I can not add very much to what Mr. Edgar has said. There are one or two little things I think will be of interest to the committee, and I am going to call your attention to them again. Our clay in the ground does not represent 25 cents a ton to us in the cost of production. The large amount is 70 per cent for labor. The cost for labor is the principal item. Next comes the coal cost, and then the incidentals, and whatever else is left after that we get. There is very little profit in it. Now, that is the whole story so far as that goes.

Mr. HAWLEY. The transportation cost must be met.

Mr. PHILLIPS. Transportation; yes. I am glad you mentioned that. These gentlemen suffer more from that; these gentlemen from the South more than we do in Pennsylvania. Our railroad rates are not quite so high as theirs from the South; but we in Pennsylvania have to pay double the amount of wages our dear friends from the South have to pay, so it is a fifty-fifty proposition when you get through.

There will be no question, if English clay is allowed to come in here with a $3 freight rate, or about $3, from England to our market. With that situation, unless we have sufficient protection, every clay man in the United States is going to go out of business, because he will lose money, and he can not make expenses. That is plain English, and there can be no question about it.

Now, with regard to this question of English clay: English clays are a little whiter. They are a little smoother. The question of the whiteness is no quality whatever. I will take two pieces of paper here [illustrating]. You will see that this one [indicating] is a little whiter than that one [indicating]. This one represents about

the English shade of white as against this one, which represents about the American shade of white. Now, if you can not get this one [indicating] you will take that one [indicating], and you will not know the difference when you come to use them.

In 1918, when we were down here, a gentleman representing the English clay people stated that the paper mills could not make paper if they did not have this china clay. They tried to buy my clay on the way down, and they did buy it on the way back, and they have been making paper on that, and the paper which we are writing on now is made with the clays of that kind.

Now, I want to tell you with regard to the quality of the clays, etc. The English clay in some respects is a little bit better, but the only way we will ever make ours as good is by having adequate protection, so that we can pay the wages which we have to and continue the operation of our plants. We can turn out here, and we will turn out here, as good a clay as they can turn out in England, but we will be stopped from turning it out unless some remedy is given us, unless we are given sufficient protection that we can continue in business.

The CHAIRMAN. Do the English people sell their clay in our market at a less price than they sell it for at home?

Mr. PHILLIPS. Yes, sir; and they sell everything else the same way, and the moment they get our people out of business then they will put the price up—the minute they get the American producers out of the way.

The CHAIRMAN. Then you would be in favor of an antidumping law?

Mr. PHILLIPS. Yes, sir; I would be, absolutely.

The CHAIRMAN. So am I.

Mr. PHILLIPS. We pay our labor here good wages and we buy our coal here, and it is inevitable that we can not meet this condition unless we are given this protection.

The CHAIRMAN. This committee reported about a year ago an antidumping bill, which was passed by the House. That bill is in the Senate, and if it is not passed by the 4th of March I believe it is the intent of this committee to couple it with this tariff.

Mr. PHILLIPS. That will be one of the best things that this committee can do.

Mr. GARNER. You come from Pennsylvania?

Mr. PHILLIPS. Yes.

Mr. GARNER. Do you know the reason why that bill was not passed?

Mr. PHILLIPS. No.

Mr. GARNER. You ought to know if you are well informed.

Mr. PHILLIPS. I am not, I am sorry to say. However, I am always willing to learn.

Mr. GARNER. Ask the Senator from Pennsylvania, who is chairman of the Senate Finance Committee, why it did not pass.

The CHAIRMAN. He is going to say that Senator Penrose has not attended to business.

Mr. PHILLIPS. I know Senator Penrose very well and he has done me a great many favors and a great many favors for other people, and I believe that he will do right.

Mr. GARNER. He has overlooked you for 12 months.

The CHAIRMAN. Let me say to the gentleman from Texas that 12 months is not as bad as 8 years. You have been overlooked for 8 years.

Mr. PHILLIPS. I did not dare to say that, although I would like to have said it, and I am awful glad that you said it.

L. C. HAYNE, PRESIDENT OF THE AMERICAN CHINA CLAY OR KAOLIN ASSOCIATION.

The CHAIRMAN. Just give your name, address, and the business you represent to the reporter.

Mr. HAYNE. L. C. Hayne, president of the American China Clay or Kaolin Association.

Mr. Chairman and gentlemen of the committee, I am filing the official brief of that association with the committee setting forth the truest facts that can be had as a basis for our good judgment in giving $6 as the tariff that should be placed on English clays.

Mr. TREADWAY. That is the rate that you are recommending? Did you recommend the rate? I did not hear you.

Mr. HAYNE. Yes, sir.

Mr. TREADWAY. What was that rate that you recommended?

Mr. HAYNE. Six dollars a ton. That is an increase over the present tariff of $4.75, the present tariff being $1.25.

Mr. TREADWAY. Yes; $1.25.

Mr. HAYNE. Mr. Chairman and gentlemen of the committee, in the time alloted, of 10 minutes, I could not make very good headway, so I will submit my brief to you without reading it, and I shall therefore simply give you a very brief résumé of some of the points involved in the brief.

The situation of the clay miners at the present hour is very serious. The American mines have all shut down, except a few in Pennsylvania, and all in the South I know of, except two, and they are now on the eve of closing down.

The business of the manufacturers is wholly lost to the American producer to the extent of 60 per cent for 1921, and those good English people have announced that they intend during the first six months of 1921 to put 500,000 tons of English clays in American seaports.

Mr. LONGWORTH. About how many men are employed in your industry; can you give us the number?

Mr. HAYNE. I should say anywhere from approximately 7,000 to 10,000. There are approximately 10,000 men which will be involved in the industry.

Mr. TREADWAY. What are the average rates paid these 10,000 men?

Mr. HAYNE. Why, it runs all the way from $2.50 to $10 per day.

Mr. TREADWAY. Have you the corresponding figures paid for labor in England?

Mr. HAYNE. Our information is that their cost is easily 60 per cent under ours. We have Mr. Ross with us, who prepared that data which is attached to our brief as an exhibit, which gives all of the figures that it has been possible to ascertain and such data comes either from the American consul—I think it comes from the American consul—although I do not know, but it is the best and most reliable source we could get it from.

Mr. GARNER. You say it comes from the American consuls?

Mr. HAYNE. Yes; I think it does. I do not recall, but I think it does come from the American consuls. Mr. Ross is here and could answer the question. I know that it comes from the source that we were able to reach over there, and I think it comes from a department of that source.

I think it is almost impossible for this committee to realize the seriousness of the situation. I think for an industry such as we have that proved its ability wonderfully well to produce this material when they could not get their clays over here from England, and it was an industry that was indispensable to the Government and an industry that is susceptible to the finest sort of development, one that constitutes a national resource of inestimable value, if it is possible for us to get the protection that will enable us to make it what it should be.

These gentlemen have spoken on the superiority of some English clays.

Some English clays do have certain good qualities.

Gentlemen, that is really theoretical, though. All we need is the protection to demonstrate that our clay is not only as good but superior not only for that purpose, but for many other purposes.

It is not a physical problem in that respect. It is an economic problem. It would cost us approximately $5 a ton to put that clay in shape to compete with the particular brand of English clay, and there is not so much of that particular brand of English clay sold here anyway.

I think, gentlemen, that you all understand that we are not coming here from selfish motives at all. We are coming here to help all who are engaged in the business, and who may engage in it and not for revenue. That is incidental so far as I am concerned. We are coming here for protection. Under any circumstances in the world the English people will ship 200,000 tons of clay to America.

A tariff of $6 would give a revenue of $1,200,000 on that item. They would ship it if the tariff were $10 a ton. I want to say to you that we have surrendered 60 per cent of our business for 1921. We want to tell you in all earnestness that there is no chance for us to get in the American market for 1921 unless you do something to protect this interest.

Mr. HAWLEY. If we should put a provision in the bill equalizing the cost of the English clay abroad, with those of this country, would that be satisfactory?

Mr. HAYNE. That is what we are asking you to do, and that is what I wish to assure you $6 will barely do. We have underestimated it rather than overstated it.

Mr. HAWLEY. You think $6 per ton would put you on a competitive basis?

Mr. HAYNE. And I think it would result in the development of an industry that the Government would feel proud of in ordinary times, and in an emergency like war, when we rely more upon our own resources than any other time, I think we would all be proud of it.

Mr. TREADWAY. Included in the $6 would be the ratio, the delivery in Maine, and all of the individual costs, freight transportation, rail

transportation, as compared with ocean freight rates. And Mr. Hawley asked you if this difference in cost would protect the home market from the importations abroad. Freight, of course, is a very important item, and freight from Georgia to Maine is a very large item.

Mr. HAYNE. There are a number of items entering into the costs. I am dealing with them all. I am a clay shipper.

Mr. TREADWAY. You mean delivery?

Mr. HAYNE. Yes, sir. Now, you take the Atlantic seaports; they are getting their freights over here—I understand that they are now probably 20 shillings, which equals about $3.50 at the present exchange, with a promise in the very near future of a rate of 15 shillings, which will, of course, result in the English being able to deliver their clay to the American paper mills a great deal cheaper.

Mr. LONGWORTH. What are the other uses for this clay—to what other uses is it put other than the paper?

Mr. HAYNE. It enters into the manufacture of electric procelains, tile, china, the newspaper field, and the chemists have now about completed their work in preparing it for use in linoleums and things of that sort. We believe that we have American clays for all of those purposes, but we do not have the encouragement to put our money into the business to make all of those things.

Mr. LONGWORTH. What is the difference in the actual cost, or what is the proportionate cost to the finished products, of the clay, whatever it may go into; that would be very slight?

Mr. HAYNE. Very slight, indeed.

Mr. LONGWORTH. So that the ultimate consumer that we like to talk about so much would be very little affected in the price increase which would result from an increase in the price of clay?

Mr. HAYNE. It would be very little, indeed. I am glad you asked that question. It will be given from the attached exhibit.

Under the tariff we are asking you to fix for English clays, the cost to the consumer will amount to sixty-eight one-thousandths of a cent.

Mr. LONGWORTH. That is to say, the finished piece of paper?

Mr. HAYNE. Yes, sir.

Mr. YOUNG. How much paper?

Mr. HAYNE. A pound of paper.

Mr. LONGWORTH. Suppose, in buying a pound of paper—what would a pound of good paper cost?

Mr. HAYNE. I am not familiar with that. I do not know. I would be glad to answer if I knew.

Mr. LONGWORTH. Suppose it cost a dollar; how much would be the cost of the clay entering into that paper?

Mr. HAYNE. Our figures show that it is so infinitesimal that the consumer would not feel it at all.

Mr. LONGWORTH. It would be the same with the electrical fixtures?

Mr. HAYNE. Yes; approximately the same.

Mr. GARNER. If we adopted $6 per ton as the rate of duty on English clays, would that enable you to sell in Portland, Me., in competition with the English clays?

Mr. HAYNE. Yes, sir; but the profit would be proportionately less, too.

Mr. GARNER. I understand that the profit would be proportionately less, but would it enable you to sell clays in Portland, Me., in competition with the English?

Mr. HAYNE. Yes; we could compete with them.

Mr. GARNER. Well, that, of course, has to be taken into consideration in determining the rate; and you have to take into consideration the freight rate at present from Georgia?

Mr. HAYNE. Yes, sir.

Mr. GARNER. To Portland, Me.?

Mr. HAYNE. Yes, sir.

Mr. GARNER. Now, that would enable you to monopolize the market, to the exclusion of the English clays, at points in the Carolinas and near-by places?

Mr. HAYNE. Well, we have no points.

Mr. GARNER. You have no customers in that territory? How about Philadelphia, for instance?

Mr. HAYNE. Yes; we have a market in Philadelphia, Pa.

Mr. GARNER. Your freight rates from Georgia to Philadelphia are not the same as they are from Georgia to Portland, Me.?

Mr. HAYNE. No; they are somewhat less.

Mr. GARNER. They are somewhat less; so that if $6 is the difference of cost of producing in England, delivered at Portland, Me., then the difference in freight to Philadelphia would give you that much more?

Mr. HAYNE. We would be entitled to that, too.

Now, I want to tell you, in all seriousness, that some of our miners, Mr. Chairman, claim that it costs more to get their clays to the manufacturer than the miner gets for the clay at the mine.

The CHAIRMAN. In other words, the English have all of the American markets at the present time?

Mr. HAYNE. They have had them ever since 1909.

Mr. GARNER. They have had the market since you have had an advance?

Mr. HAYNE. They had them; I know they have had them at the start, and they had them up until the bill passed which, I believe, gave us $2.55 tariff, and that was finally knocked down to $1.25 under the 1913 tariff. The highest our revenue on the English product was $640,000 on 50,000 tons. In 1919 the tariff was $1.25, which is no tariff at all so far as we can appreciate it.

I want to say in conclusion, Mr. Chairman and gentlemen, I am a protectionist.

The CHAIRMAN. You look like it, sir.

Mr. HAWLEY. He talks like it, too.

Mr. HAYNE. And I am for the protection of American products. I stand for the protection of American industry, and I do hope that the good, red-blooded people that we have in this country around here will see to it that we shall never be forced out of business, for there will be no excuse for it.

Mr. LONGWORTH. I do not think that there is any question but what the American people demonstrated last year, declared for a protective tariff.

Mr. HAYNE. Yes, sir.

Mr. LONGWORTH. And our problem is to see that it is a scientific tariff.

Mr. HAYNE. That is the problem I know you have. We have destroyed the long hauls for the railroad, and they were entitled to their increases. They lose out entirely on the long hauls.

Mr. GREEN. When the American manufacturer imports the English clay we will get revenue out of duty.

Mr. HAWLEY. And if we do not get the revenue out of the tariff we will get it out of the income tax!

Mr. GREEN. If the business is killed, what about that?

Mr. HAYNE. We will not get anything. You are not going to get anything out of the 1921 business, and I have already told you the reason why.

BRIEF OF THE ASSOCIATION OF AMERICAN CLAY PRODUCERS.

It is recommended that the duty upon china clay or kaolin should be increased from $1.25 a ton to at least $6 a ton.

The reasons for this recommendation grew out of the several conditions which affect the production, distribution, and uses of china clay or kaolin in the United States, and the conditions under which china clay or kaolin is produced in England, the chief competing source, transported and distributed in the United States in competition with the domestic article. These conditions will be separately and briefly presented herein.

WHAT IS CHINA CLAY OR KAOLIN?

China clay or kaolin is a final product of the decomposition of granite, and is a white, very fine powder, which forms a smooth, white paste when kneaded with water. When dried, the paste cakes into lumps of little coherence but of uniform smooth and soft texture, free from the slightest degree of grittiness, but powdery rather than greasy to the touch.

LOCATION OF KNOWN DEPOSITS.

The United States Geological Survey, in Mineral Resources, part 2, reports that china clay or kaolin is produced in the States of Delaware, Missouri, North Carolina, Pennsylvania, Vermont, California, Georgia, South Carolina, Texas, and Florida, varying in quantity in the different States and possessing qualities slightly differing, which give rise to classifications based upon the uses to which it is put in the arts and industries, the wide range of which renders some of the deposits better suited to certain uses than others.

USES.

The two chief uses for china clay or kaolin are for paper making and for pottery, paper making consuming about one-half of the production, domestic and foreign, and pottery about one-third, and the remainder goes into various manufactures. China clay is always employed in paper making as a "filler" that is mixed with glue or size, as a material for filling the pores or voids between the fibers of vegetable pulp, and form the grain or skeleton of the paper. This treatment gives the paper body and a smooth, solid surface. Different qualities of paper require different grades of clay—that is, greater or less freedom from impurities or coloring matter. Pottery clays, apart from the impurities of coloring matter, require certain qualities necessary in the processes of molding and firing which are not material to paper clays.

LOCATION OF PROPERTIES AND WORKS.

The properties and works of the domestic kaolin mining industries are located principally in the States of Pennsylvania, New Jersey, Maryland, North and South Carolina, Georgia, and Florida. The deposits of these clays are generally known as sedimentary clays and are found under surface burdens ranging from

2 to 50 feet, all of which has to be removed. No practical method of underground mining for this material has been found. The thickness of these clay beds vary from 10 to 20 feet, and it may be calculated that about 4 cubic yards of surface has to be removed for each yard of clay mined. Some of these clays are sufficiently pure to be shipped crude after slight preparation in selection and drying. Others require purifying and standardizing.

EQUIPMENT.

The production of china clay or kaolin requires extensive excavating and washing equipment. The amount of equipment depends upon (1) the amount of material overlying the deposit, which must all be removed before the clay can be mined; (2) the purity of the deposit, especially the amount and character of the impurity, such as quartz and mica; and (3) the grade of the finished product desired. The domestic deposits are not less pure than those abroad, but more overburden must be removed before the deposit can be quarried. All requisite machinery is of domestic manufacture. It is important that the stripping operation be done thoroughly, because even small amounts of red clay in the finished product make it practically valueless for use in fine papers and white pottery.

COMPETING FOREIGN SOURCES OF CHINA CLAY OR KAOLIN.

England is the dominating factor in the china-clay trade, by virtue of its extensive deposits of high-grade clays and well-established organizations and favorable ocean transportation. The chief deposits are located in Cornwall and Devon, and are extensive, and Cornish clay forms the bulk of imports of kaolin into the United States. Such shipments were valued, before the war, at approximately $1,500,000 to $1,750,000 annually. The quantities sent to the United States during the war period were considerably reduced, owing to the difficulties of shipment and labor conditions, but the trade now shows signs of recovering. During 1919, 165,403 tons of china clay, valued at nearly $2,000,000, were imported from the United Kingdom. Various grades of clay are produced in the Cornwall district. Deposits of kaolin exist and are mined to some extent in various European countries, but the production and the amount imported from those sources into the United States are negligible compared with the importations from England.

DOMESTIC PRODUCTION AND CONSUMPTION.

During the period 1910 to 1917 the domestic production of kaolin, both pure and of paper clay grade, never equaled the importation of that material from England. The utilization of domestic clays has increased steadily, however, especialy in the paper manufacturing industry, where color and fineness are the only qualities to be considered. In 1917 domestic consumption of kaolin suitable for fine china and paper making amounted to almost 438,000 short tons. Of this 231,500 tons, or 52.7 per cent, were imported and the balance supplied from domestic sources of supply. The domestic production was consumed by the paper manufacturers and the producers of dry pressed tile, sanitary ware, and electrical porcelains. In the four war years, 1915 to 1918, the average yearly quantity and value of kaolin imports decreased a little less than 20 per cent, as compared with the prewar years, 1911 to 1914. In 1918 imports fell from above 240,000 tons, the average for the eight years 1910–1917, to about 193,225 tons, while the value increased almost $1 per ton, or 17 per cent. The imports, so far as reported for 1919, were 146,250 tons, of a total value of $1,436,766, or about $9.82 per ton average, as against 231,234 tons imported in 1910, valued at $1,563,998. The production in the United States increased from 120,170 short tons, valued at $676,849, in 1910, to 205,334 short tons, valued at $1,263,799, in 1917. Thus it will be seen that the importation of English clay has slightly fallen off and the domestic product has a little more than proportionately increased, a situation readily explained by the fact that, prior to the war, when ocean freight rates to the United States as low as 5 shillings per ton were obtainable, some of the lower-grade English clays were profitably sold in the United States, but with the ocean freight rates increased as a result of scarcity of shipping incident to the war to 20 shillings or more per ton the cheaper American clays displaced the English clays of the same grade in domestic consumption.

IMPORTS AND REVENUE.

China clay or kaolin is the most important of the imported clays, constituting over 80 per cent of the quantity and value of all clay imports in 1918. The duty collected upon kaolin imports has been an important source of revenue compared with the quantity and value of it imported. The revenue from this source averaged over $617,000 per annum during the fiscal years 1910 and 1913, under the tariff act of 1909, wherein the duty was fixed at $2.50 per ton, while the duties collected in 1919, under the tariff act of 1913, wherein the duty was fixed at $1.25 per ton, were only $182,825 and the ad valorem equivalent of this duty for the year 1919 was 12.72 per cent as against 37.61 per cent in 1910 under the tariff act of 1909.

SPECIAL DUTY PREFERABLE TO AD VALOREM.

A specific duty is preferable in dealing with this commodity, because of the difficulty, if not impossibility, of determining the quality of clay by any physical examination of it in bulk and without either chemical or physical tests adapted to the varying conditions of use under molding, drying, and firing of chinaware, electrical porcelain ware and other article into which kaolin enters. As value is dependent upon quality and quality is not made manifest to sight or touch, it is clear that the specific duty is just to the Government, just to the importer, and is easy and certain of administration.

INFLUENCE OF ADEQUATE TARIFF UPON THE KAOLIN INDUSTRY.

It is doubtful if domestic kaolin will entirely replace the imported article for highest grade pottery and highest grade paper unless the quality of domestic kaolin is improved, either through the discovery of higher grade deposits or improved systems of purifying and standardizing the product of the mines. Increased duties might not result in the immediate reduction of imports for pottery uses, but they would undoubtedly justify and stimulate experiment and research by domestic producers, with the result that the domestic produce would attain greater uniformity and purity and eventually supply a larger percentage of domestic demand both in the higher grades of pottery and paper. It is within the experience of some of the producers belonging to this association that the better grades of clay, as washed, blended, and prepared for that purpose, have been worked into high-class book paper and for coating purposes with satisfactory results to the manufacturer using them, and the problem before the American producer to meet the demands of the highest class paper uses for kaolin is more emphatically one of overcoming the differences in cost of production and transportation in favor of his English rival, and the prejudices that have been begotten in favor of English clay by long-continued use of it in the absence of any comparable domestic product, than in any inherent difficulty in the quality of domestic clay or its susceptibility to refinement suitable for the highest class paper use. The outlook of American clay for pottery purposes is a problem of fire, physics, and chemistry. The best results in that industry are now obtained by blending of clays of widely different origin. No one clay, American, English, or Bohemian, possesses in itself all the elements required in the production of the finest porcelains, but the consumption in this branch of the industry is the least important part of it, and it can be with confidence said that the problems involved are more problems of the laboratory than of the mine.

If the duty is to be fixed from the standpoint alone of revenue to the Government, a higher tariff than that provided for will greatly enhance the revenue. As previously pointed out in this brief, when the duty was $2.50 per ton, the revenue was $659,995 in 1913, while the duties collected in 1919, under a tariff rate of $1.25 per ton, were only $182,825 on an imported tonnage of 146,260. If American clays are never improved in quality to the standard of the best English clays, either by the discovery of new deposits or by new processes of refining, and if the best grade English clays are a necessity to the best grade paper, pottery, and porcelain manufacturers of this country, then it will follow that the best grade English clays will be imported in the future as in the past, notwithstanding the higher duty, and the Treasury will derive the benefit. If the only effect of a higher duty is to afford the domestic producer and manufacturer a measure of protection against the cheaper English product, even in that event an industry of vastly increasing importance will gain in strength and usefulness and national independence of foreign supply of an indispensable raw

material. The proper measure of that duty should be the sum of the several items composing cost of production and cost of distribution at home in comparison with the English clays of Cornwall landed here, and this leads to pointing out the competitive conditions under which the English and the American product meet in the American market.

COMPETITIVE CONDITIONS.

Domestic kaolin mines for the most part are located at points quite remote from places of utilization and manufacture, and are at a great disadvantage compared with English clays, which can be normally shipped from Cornwall to New York, Philadelphia, and Portland, Me., at lower freight rates than are paid to transport the product of the mines of the Appalachian Range and the Coastal Plain adjacent to it. New York and Philadelphia are large markets for clay, and Portland, Me., is the gateway to the paper-mill industry of that State. As an example of domestic rail rates, the rate from Edgar, Fla., a producing center, to Zanesville, Ohio, is now (October, 1920) $10 per short ton, while the rate is $6.90 from New York and $9.70 from New Orleans, respectively. It is claimed that clays could formerly be shipped from Fowey and Cornwall, England, to Chicago via Philadelphia, Boston, and Portland for approximately the same freight rate which was paid from Georgia, South Carolina, and Florida. To some other consuming points the rate in favor of the importer of foreign clay was the same, or even greater. Our information is that the entire freight charge across the Atlantic is now only 17 shillings or about $3 per ton, and going almost as low as the prewar trans-Atlantic rate. As ocean freight rates diminish, as must inevitably result from the increased competition in ocean freights, this diminishng cost of transportation of the product of Cornwall mines to American ports increased the hardship of American producers. This condition is now more acute than any available statistics prove. Transportation rates by rail in the United States have been lately materially increased, and are likely to be still further increased, with the result that as ocean rates decline American rail rates rise, constantly widening the gulf between English and domestic cost of transportation, and this condition bears more heavily against the domestic industry where, from the nature of the article in its cruder state, cost of transportation constitutes so large a part of the price to the manufacturer of the finished product.

ORGANIZATION AND CAPITAL EMPLOYED IN THE ENGLISH INDUSTRY.

As understood in the clay-mining industry, there has been a china clay amalgamation in England, composed of the West of England and Great Beam Clay Co. (Ltd.), Messrs. Martin Bros. (Ltd.), and the North Cornwall China Clay Co. (Ltd.), whose products are raw materials used in household commodities, paper, pottery, and as fillers for cotton goods, with a capital of $10,000,000, and its purpose is to concentrate its activities on the development of markets at home and abroad. Their properties comprise 18 china clay mines, two china quarries, one ground china stone works, brick works, and cooperage plants. The North Cornwall Co.'s clay deposit is supposed to be the largest in the world. Thus, there comes under the control of a single firm the richest china clay fields in Cornwall and Devon, where, alone, in Great Britain, china clay is found. The china clay industry in England has risen, in 100 years, from two thousand to over a million tons per annum. The following extract from "The China Clay Industry in the West of England," by Henry F. Collins, is probably a fair statement of conditions in the British field:

"Few of the English clay companies kept their accounts in such form as to readily get at the total cost of each section of the operations or admit of comparisons, nor indeed are the figures available for publication. Many of the items, too, are liable to very wide variations, in accordance with conditions obtaining at different pits."

No combination of American capital or consolidation of producers, whatever the resultant power and efficiency either for economic production or competitive purposes, is possible in the United States. The combination of capital in the clay industry in England, above described, is, under English law, not only lawful but laudable, while in the United States, a similar combination for similar purposes, though it be defensive, is, by law, unlawful and a crime. The Ameri-

can industry, therefore, neither is nor can become a match for its competitor in the attribute of organization.

INDIVIDUALISM AND LABOR CONDITIONS IN THE AMERICAN INDUSTRY.

Very few domestic kaolin producers keep detailed costs covering mining and cleaning operation. The industry is comparatively young and has involved a considerable investment of money and energy in every department for the purpose of developing the most economical methods of producing the clays suited for the different commercial uses. Various individual producers have gone through exasperating experiences, have devoted much time and capital to the working out of problems connected with their business, and few have reached the point where returns are commensurate with the investment. During the period of the war, when the higher cost of freight and the lessened output of English clays increased their cost to the American consumer, opportunity was afforded to the American producers of clay to realize satisfactory returns on their investment, and by this experience they are encouraged to believe that a tariff which adequately protects them against the advantage of capital, labor, and the transportation enjoyed by their English rivals, will place the clay industry of the United States upon a profitable, substantial, and expanding basis, with the inevitable result of revenue to the Government and national independence and self-sufficiency in an industry indispensable to the paper trade and the domestic and electrical porcelains of constantly increasing daily use.

The attached exhibit marked "Exhibit A" shows beyond question of doubt the immediate and vital necessity of the tariff asked for.

By L. C. HAYNE, *President.*

EXHIBIT A.

Foreword of explanation of statistics.—Statistics on the following pages are arranged in columns, as follows:

Column 1 shows the price of English clay, ocean freight and duty paid per long ton of 2,240 pounds f. o. b. United States Atlantic ports.

Column 2 shows the cost of loading, railroad freight, including tax on English clay from port of entry to point of consumption, in long tons of 2,240 pounds.

Column 3 shows domestic freight rates from mines to point of consumption, tax included, in tons of 2,000 pounds.

Column 4 shows price of a long ton of English clay, 2,240 pounds, at point of consumption.

Column 5 shows the price per ton of 2,000 pounds of English clay at point of consumption, because the Americans sell their clay in tons of 2,000 pounds.

Column 6 shows the selling price necessary f. o. b. mines for domestic clay to meet English competition in tons of 2,000 pounds.

Column 7 shows minimum selling price f. o. b. mines necessary to obtain for domestic clay in bulk to exist.

Column 8 shows loss per ton of domestic mines to run and compete under present conditions.

Under the column labeled "Miscellaneous" we show the exact average selling price of all English clay shipped to the United States in 1920, up to September 30. This price is given f. o. b. English ports per ton of 2,240 pounds. We also show known ocean freight rates in shillings from England to the United States and their equivalent in dollars and cents. We also show the rate promised by the English interests, which they expect to have in effect shortly. In the same column we show our railroad freight rates from our mines to the same United States ports of entry.

Point of consumption.	Price of English clay, ocean freight, tax, and duty paid, ton 2,240 pounds, f. o. b. United States ports.	Cost of loading, freight (including tax on English clay) from port of entry to point of consumption.	Domestic freight rate from mines to point of consumption, tax included.	Price of ton of English clay, 2,240 pounds at point of consumption.	Price of ton of English clay, 2,000 pounds, at point of consumption.	Selling price necessary f. o. b. mines for domestic clay to meet English 2,000 pounds ton.	Minimum selling price f. o. b. mines necessary to obtain for good domestic clay in bulk, to exist.	Loss per ton to domestic mines to run and compete under present conditions.
Port, Portland, Me.	$14.65							
Cumberland Mills, Me.		$1.27	$9.06	$15.92	$14.22	$5.16	$10.00	$4.84
Rumford, Me.		3.58	10.78	18.23	16.28	5.50	10.00	4.50
Mechanic Falls, Me.		2.77	10.78	17.42	15.56	4.78	10.00	5.22
Port, Boston, Mass.	14.65							
Boston, Mass.			9.06	14.65	13.18	4.12	10.00	5.88
Lawrence, Mass.		2.42	9.06	17.07	15.24	6.18	10.00	3.82
Fitchburg, Mass.		2.88	9.06	17.53	15.65	6.59	10.00	3.41
East Walpole, Mass.		2.77	9.06	17.42	15.56	4.78	10.00	5.22
Wauchusett, Mass.		2.88	9.06	17.53	15.65	6.59	10.00	3.41
Framingham, Mass.		2.88	9.06	17.53	15.65	6.59	10.00	3.41
Worcester, Mass.		2.88	9.06	17.53	15.65	6.59	10.00	3.41
Mechanicsville, N. Y.		4.96	8.65	19.61	17.51	8.45	10.00	1.55
Ticonderoga, N. Y.		7.45	11.42	22.10	19.74	8.32	10.00	1.68
Port, New York, N. Y.	14.65							
Albany, N. Y.		5.43	8.65	20.18	18.02	9.37	10.00	.63
Cohoes, N. Y.		5.43	8.65	20.18	18.02	9.37	10.00	.63
Buchanan, N. Y. (Montrose)		3.70	8.65	18.35	16.39	7.74	10.00	2.26
Cortland, N. Y.		5.90	8.65	20.55	18.35	9.70	10.00	.30
Athenia, N. J.		3.58	8.65	18.23	16.28	7.63	10.00	2.37
Delawana, N. J.		3.23	8.65	17.88	15.96	7.31	10.00	2.69
Port, Philadelphia, Pa.	14.65							
Philadelphia, Pa.		1.50	6.18	16.15	14.42	8.24	10.00	1.76
Manayunk, Pa.		1.50	6.18	16.15	14.42	8.24	10.00	1.76
Tyrone, Pa.		5.20	6.38	19.85	17.73	9.35	10.00	.65
Ports:								
Baltimore, Md.	14.65							
Johnsonburg, Pa.		5.19	8.38	19.84	17.72	9.34	10.00	.66
Piedmont, W. Va.		4.85	7.00	19.50	17.42	10.42	10.00	+.42
Wilmington, Del.		2.26	6.18	16.91	15.00	8.82	10.00	+1.18
Luke, Md.		4.85	7.00	19.50	17.42	10.42	10.00	+.42
Covington, Va.		5.77	6.87	20.42	18.24	11.37	10.00	+1.37
Akron, Ohio		7.96	7.28	22.61	20.10	12.82	10.00	+2.82
East Liverpool, Ohio		6.92	8.10	21.57	19.36	11.26	10.00	+1.26
Kalamazoo, Mich.		8.88	7.55	13.53	20.91	13.36	10.00	+3.36
Chicago, Ill.		9.68	7.14	24.34	21.74	14.60	10.00	+4.60

MISCELLANEOUS.

Selling price f. o. b. English ports of all English clay exported to the United States from January 1, 1920, to September 30, 1920:

English tons (2,240 pounds), 226,875; value, $2,520,191; average price per ton, $11.11.

Ocean freight rates in shillings and in dollars and cents per English ton of 2,240 pounds, sterling exchange at $3.60:

Rates used in past, 20 shillings ($3.60); 17½ shillings ($3.05).

Rates promised per ton 2,240 pounds, 15 shillings ($2.625).

This rate, if figured 2,000 pounds to the ton as used in America, would be $2.344.

Freight rates from our clay mines to Atlantic ports of entry and points near by in dollars per ton, 2,000 pounds tax included:

Portland	$9.06
New York	7.96
Boston	9.06
Philadelphia	6.18
Baltimore	5.90

Explanatory note.—The cost of English clay given in this exhibit is based on report of Department of Commerce, Statistics Division, file 17, for first nine months of 1920, showing importation of 226,876 long tons of English china clay, or kaolin, of a value of $2,520,191 ex dock, England, which gives us an average value of $11.11 per ton of 2,240 pounds. Because we can not compete with the highest grade of English clay, which sells several dollars a ton higher than the filler clays with which we compete, the $11.11 would not be a fair basis of comparison; the average is too high. So we have taken $10 as the basis of the selling price of English clay at their ports. This is at least $1 per ton high, but we wish to understate rather than to exaggerate in the slightest degree. It also is identical with our price f. o. b. mines, which we must get to exist.

To this we have added a 20-shilling ocean freight rate based on information (Dec. 10, 1920) from Fred L. Murphy, traffic manager, United States Shipping Board, Washington, D. C., at the September sterling exchange rate of $3.40, which was the top of the sterling rate for the nine months taken into consideration, making $3.40 per long ton of 2,240 pounds ocean freight. We also added the present duty of $1.25 per ton, making a total cost f. o. b. port of entry United States of $14.65.

General note.—In column 8 you have noted that all points in New England, and practically all points east of Pittsburgh and Buffalo show a serious loss to the American clay mines if they attempted to compete with the English product. This column proves in every instance where a loss is shown that we are practically shut out of that territory entirely. The worst situation, of course, is New England and the points close to the other Atlantic ports of entry. You can readily understand why the American mines are all practically shut down, and not because of business depression, for if we had our usual share of the clay tonnage now being used all of our mines would be running part time. All mines will have to stay shut down until they get relief. The conditions now are 80 per cent worse than when the representatives of the Tariff Commission visited the clay mines. Thousands of the clay workers are out of employment. Their wages run from $2.50 to $10 per day, depending on the character of the work they do.

Note.—We wish strongly to go on record that the figures here shown do not represent the full damage the importation of English clay is doing the American clay industry, under the existing tariff, regularly, for the following reasons:

1. The domestic clay industry does not profess to compete with the specially prepared, bleached, and blued high-priced English coating grade of the paper trade and certain special high-priced pottery clay. Therefore, as to these clays, which sell several dollars a ton above the English filler clays, against which domestic clay principally competes, the price of $14.65 per ton of 2,240 pounds shown in this exhibit is much too high. We have used the $14.65 price because it was the only authentic basis available, there being no way of separating the amount of different grades imported; that the tonnage of the higher priced clays imported is large, is, however, well known. Our contention is that domestic clay has unqualifiedly made good for paper filler purposes and the American paper manufacturers do not need to resort to English clay as a filler at the ruin of the domestic clay industry. Therefore, high-priced imported clay brings up the average price far above that of filler grades.

2. The figures shown in this exhibit are based on normal conditions and do not reflect the fact that numerous large cargoes of English clay have arrived at all American ports since the Department of Commerce report of September 30, and before the business depression struck the paper trade. These cargoes were sold at prices much below figures above mentioned. The history of business shows that this dumping of a large tonnage of low tariff has been in effect, the fact being that whenever large clay tonnage was piled up in England, and cargo space plentiful, the clay was dumped on American markets at little or no transportation cost, and often has recently sold at prices bid by the consumer.

3. We have used 20-shilling ocean rate because it was furnished by the Shipping Board, although we have definite knowledge that the ocean freight rate paid in many instances during 1920 was 17.6 shillings, and are strongly of the opinion that ocean rates will soon, if they have not already done so, go as low as 15 shillings, as promised by the agents of the English shippers.

4. The tonnage figures given for the first nine months of 1920 are very low, because on account of shipping and English mine conditions English clay did not arrive in large quantities before July, 1920. Since July there has been continuous heavy shipments. We are reliably informed that certain agents of the English interests have stated repeatedly that there will be 500,000 tons of English clay imported the first six months of 1921, and further, that the American clay tonnage will be entirely driven out of New England and territory adjacent to the Atlantic seaboard. We will concede they have practically done so already.

5. This exhibit shows the heavy burden carried by the clay shippers in the form of freight rates. We wish to emphasize the fact that the last raise effective in August, while it shut us out of some of our best markets and lost us at least 60 per cent of our regular clay tonnage, did not cause all the trouble. We have been unable to compete at certain northeastern points for years because of high rates. We wish further to say that we believe the life of our railroads depends on profitable rates, and are willing to pay them if we are

given the protection which will allow us to sell clay profitably. The advance in freight rates in clay will not benefit the railroads without an increase in tariff on clay, because there will be little or no clay shipped to half of the territory east of the Mississippi River.

In addition to being badly hurt by our increased freight rates, the English have cut their prices, and because of their low ocean-freight rates, we are badly crippled.

6. Anyone who knows the facts as they are presented in the above exhibit will concede that the American clay miners are not asking for a higher tariff to make additional profits. They are asking Congress to save the very life of their industry.

7. Last, but most important of all, while conditions have gotten to a point culminated by the raise in freight rates, where the ruin of many clay mines is imminent, American clay has never been able to be developed to compete with the highest grades of the imported product, because the cost of treatment added to present cost of production would bring the price of the finished product higher than high-grade English clay. That we do not attempt to compete with finest English clays is not because it is a physical impossibility, but an economic impossibility. Our crude deposits are the finest in the world. A bleaching process would add $4 or $5 per ton to cost of production, as grade in the paper industry is determined by whiteness when free from sand or grit and similarly treated in refining. The industry to be properly developed needs a considerable advance in the tariff, not merely enough to keep it alive, but enough to allow it to develop the quality and grade necessary to compete with all foreign clays. The exhibit in column number 8 shows in a startling manner that something has to be done and done quickly.

8. Finally, we wish to point out and emphasize the fact that allowing us a duty of $6 per ton, as asked for in our brief, will not damage the clay consumers except in a very small way. Clay is the cheapest as well as the smallest ingredient, in point of percentage, used in the manufacture of paper. Suppose the present price of clay was advanced to the consumer $4.75 per ton, as we now have a duty of $1.25 per long ton of 2,240 pounds in effect—in paper making about 50 per cent of the clay is lost in manufacturing—this will make the cost to be added to the clay contained in paper $9.50. As 15 per cent is a very high percentage of clay in paper, we will take that as the basis of figuring, namely, about one-seventh of the weight of paper is clay. One-seventh of $9.50 is $1.36, added to the cost per ton of paper. As paper is sold in cents per pound, it will mean that it will cost the manufacturer 0.00068 cent per pound more in book paper and 0.00034 cent per pound more in news paper, which uses about half the percentage used in book paper, than if we did not have this tariff on clay. We do not believe that such a small item would ever be felt by the consumer, and certainly not by the public, who necessarily would pay for it in the end.

Is it necessary to point out that if the American clay producer is driven out of business, as most of them will be if they don't get the protection asked for, England will ask and get her own price for clay when American competition is removed, and her own price will be very high.

	Per ton.
Our present tariff on clay (long inadequate)	$1.25
Our railroad freight advance to far northern points averages	2.75
We are asking as a minimum figure, to offset the ballast ocean freight on foreign clay, and the determined effort to drive us out of business	2.00
Total tariff asked	6.00
We are asking an advance in tariff of	4.75
We have shown we would lose if we tried to compete now in some of our best New England trade over	5.00

We are not asking too much, but must have what we ask for to live; that is, a tariff of $6 per ton. Our industry is paralyzed and would be even if there were no business depression, and will be until we get relief.

EXHIBIT B.

TRENTON, N. J., *January 8, 1921.*

DEAR SIR: Yours of the — received in reference to meeting with you in Washington and for which please accept my thanks. The writer is very sorry to disappoint you, but this would be impossible for me at the present time, as my

condition will not warrant my leaving. If it were possible, I would be only too pleased to accept the invitation. However, if there is anything I can do in writing, I will be pleased to do anything I can along this line.

In reference to the adaptability of our clay for the potter's use would say that you need not hestitate one minute to tell our Congressmen that we are using this clay in the manufacture of tile, electric porcelain, general ware, sanitary ware, and crucibles. We are also rapidly replacing English china clay with our clay, and while it is going to take some little time to have this clay universally adopted, we need the support of our Congress to protect us against foreign clays. We think if we are given the right kind of support we can build up a business for this American industry, which to my mind, being an American, would be the first consideration of every true-blooded American. I do not believe in a proposition which would allow the clay miners to take any undue advantage of the American consumers, but we do think we are entitled to an even break on our investment, and the opening up of the resources of our own country, which in many cases has cost considerable money to do. The English market has had the cream of the clay business in this country and has been allowing our own industry to just merely exist, owing to the fact that wages in England are lower and the clays are sent over as ballast more cheaply than the freight rate that we have to pay on the railroads from the mines in the South to the factories in the North.

THE CROSSLEY MACHINE CO.,
D. CROSSLEY, *President.*

SUPPLEMENTAL BRIEF OF THE AMERICAN CLAY PRODUCERS' ASSOCIATION.

Because of the vital necessity of a sufficient increase in tariff on imported clay to save the American clay interests from ruin, and because of certain opposition on the part of a few, we respectfully ask that we be allowed to submit further evidence that a $6 tariff per ton, on imported clay, is not only just, necessary, and fair to the American clay industry, but, on the other hand, will never be felt by the American public, because the advance in cost of production would be infinitesimal.

We have already shown you why the railroad freight from the American clay mines to the points of consumption is a governing factor in the American clay industry. Our clays which compete with imported foreign clay are mined principally in South Carolina, Georgia, and Florida. The points of consumption lie in the north—the paper mills, the largest clay consumers in most instances, locate themselves as near to the spruce forests of our northern boundry as possible, hence the heavy freight charges.

It has always been difficult to compete with foreign clay near our Atlantic seaboard, because their clay is brought over practically as ballast, only $2 to $3 a ton ocean freight, while our railroad freight costs us from $6 to $8 per ton to serve the same territory. You can readily see what an advance of 33⅓ per cent in our railroad freight rates last August did to us—our freight rates jumped from $6 and $8 per ton to $8 and $11 per ton—even to $12 at some points.

The importers, having a very short haul in the East, did not feel the advance. The result is we have lost over half of our entire tonnage to the importers; we are practically shut out of the territory north of the Potomac and east of Pittsburgh and Buffalo, as we have shown in Exhibit A of our brief already filed. To further illustrate and prove this statement, please note there are 818 paper mills in the United States, 518 of which are located in the territory from which we are practically excluded, as outlined above.

Further, let us point out to you that any opposition to our request must arise from a very small per cent of American paper mills. As stated before, there are 818 paper mills in the United States—147 of these use clay: 90 use domestic clay only, 40 use both domestic and imported, and 17 use imported clay only.

The above figures are based on normal tonnage previous to the increase in railroad freight rates in August, 1920.

Other industries use clay, but the tonnage is divided between imported and American clays in about equal proportions, while the percentage of the total clay tonnage in these industries is comparatively small, with the possible exception of the potteries.

Therefore, only 50 or 60 of the paper mills would be affected, and almost all of them make high-priced paper, principally book paper. Newspaper mills don't need to use imported clay. Other papers contain little or no clay.

Another very interesting and noteworthy fact is, as one goes West and the railroad freight on imported clay increases, the percentage used decreases very materially. Book-paper mills in Wisconsin and Minnesota have almost discontinued the use of imported clay. They make fine paper and sell it. Several large book-paper mills are located in these States. Still you are told imported clay is indispensable. Suppose it is to some? If our petition for an advance of $4.75 per ton in tariff on imported clay (making a total tariff of $6) were granted, how much would it advance the cost of book paper? We figured it out in our brief, i. e., if the paper is 15 per cent of its weight—clay—it means an advance of sixty-eighth ten thousandths of 1 cent per pound ($0.00068).

If the paper is 25 per cent clay it means ninety-five ten thousandths of a cent a pound advance in cost ($0.00095). The increase on cost to the consuming public would be infinitesimal; yet to us it is absolutely necessary.

Furthermore, since the presentation of our cause to the Ways and Means Committee certain conditions have arisen which we believe further strengthen, if necessary, our contention that a $6 tariff is an absolute necessity. We gave our reasons for the $6 as follows:

$1.25 per ton present duty.
$2.75 per ton must be added to cover our August advance in railroad freight charges per ton to our northeastern points of consumption.
$2.00 per ton was requested to cover the declining ocean freight rates and the dumping of imported clay on the American market made possible by the low European labor costs and cheaper production.

In our brief, Exhibit A, we proved our case by using the ocean freight of 20 shillings per ton to show how cheaply the foreign clay could be delivered to our north Atlantic ports. Beginning February 1, 1921, this rate was reduced to 10 shillings per ton, a reduction of 10 shillings or $1.92 per ton at present rate of exchange. The ocean rate is cut in half.

When we presented our brief, the first two items of the analyzed proposed tariff, i. e. $1.25 and $2.75, a total tariff of $4 were required to put us on the same basis as we were August 1, 1920.

Now, we respectfully submit proof of the need of the extra $2 per ton, the third item in the analyzed proposed tariff. With the ocean freight reduced to $1.92 there is only $0.08 left to offset foreign competitors. Before the war the ocean freight was as low as 8 and 9 shillings per ton, and will probably be that again because clay is carried to this country really as ballast, the charges vary little more than cover loading and unloading.

Finally, gentlemen, permit us to emphasize our needs. Pardon us if we speak strongly—we feel strongly. The Payne-Aldrich tariff rate on clay of $2.50 per ton will not do us any good—it means an advance in tariff of only $1.25 per ton. It does not half cover the advance in our railroad freight rates.

The delivered price of our clay went up to two and three dollars per ton overnight, and cost us half our tonnage for 1921. It must be refunded if we are to live—the railroads can not do it—it must come from you in the form of a tariff, or many of us will go into bankruptcy. General business depression now is not considered at all in this case.

It is a cry of desperate need, not a request for an opportunity to get rich. Even if the importer were unable to bring in any clay at all the prices of the American product would not be high, because the industry is highly competitive here. There are millions of tons in our Southern States. In 60 days the American mines could supply every ton used in this country—in six months we could supply the world as far as tonnage is concerned.

We do not wish to shut out the imported clay, but are only asking for an even break—no more, no less.

F. C. HAYNE, *President*.

SUPPLEMENTAL BRIEF OF JOHN RICHARDSON CO., BOSTON, MASS., ET AL., IN REPLY TO STATEMENTS OF ASSOCIATION OF AMERICAN CLAY PRODUCERS.

At the hearing before the Ways and Means Committee in regard to the duty on china clay or kaolin, now $1.25 a ton (act of 1918, par. 76), Henderson Inches, treasurer of the John Richardson Co., made a statement and presented a brief on behalf of the importers of English china clay or kaolin. In the statement and brief the recommendation was made that the duty on china clay or kaolin be not increased.

At the same hearings representatives of the domestic clay producers requested an increase of the duty to $6 per ton. A brief was filed by the Association of American Clay Producers.

This supplementary brief is filed for the purpose of refuting certain statements made on behalf of the domestic clay producers, both in their brief and in their oral testimony before the committee. Annexed hereto as exhibits are letters form Oxford Paper Co., S. D. Warren Co., and West Virginia Pulp & Paper Co., producers of a very considerable part of the book paper manufactured in the United States, urging that the duty be not increased, and a letter from Bird & Son of East Walpole, Mass., manufacturers of low-grade papers, to the effect that they can not use English clay, as its price as compared with domestic is prohibitive.

BRIEF OF THE ASSOCIATION OF AMERICAN CLAY PRODUCERS.

The language of the brief itself is in part identical with certain information contained in the "Official Survey of the Kaolin or China Clay Industry" recently compiled bythe United States Tariff Commission in Washington.

The brief omits many facts given in the survey of the commission. The conclusion of the Tariff Commission as set forth in the survey are widely at variance with the conclusions of the brief.

The Tariff Commission under "General information" concludes: "There is no substitute for English clay in the better classes of paper, and the fact that American paper manufacturers continue to pay duty for the English clay to such a large extent confirms this statement.

"The possible and probable injury to the market of domestic clay is limited to the use of English clays, in the main, to low-grade papers. The lowest grade of English clay costs but little more than the best domestic paper clays, but the size of the total output, the values involved, and the amount of labor in our paper-clay pits are insignificiant as compared with the importance of the whole finished paper industry of the United States."

Under the heading "Tariff considerations," the commission states: "It would appear from the foregoing that the tariff plays little part in the competitive strength of foreign kaolin in the United States market. The process has been so perfected by the English producer that it sells on its quality regardless of price."

Under the heading "Miscellaneous" it is stated: "Careful consideration of the kaolin industry in the United States in comparison with the china clay imported from England, as revealed by the investigation and substantiated by the preponderance of testimony by consumers of the raw product, such as makers of high-grade china, electrical porcelain ware, high-grade book and illustration papers, etc., leads to the firm conviction that in order to advantageously compete with the foreign finished article the consumers must continue to use the imported china clay to a considerable extent, while in such industries such as certain floor tiles, print paper, decorated wall papers, the cheaper grades of chinaware, certain sanitary ware, etc., the domestic clays are readily adaptable."

The above-quoted final conclusions of the Tariff Commission, in which we concur, were not included in the brief of the Association of American Clay Producers and are opposed to the conclusions of that brief.

EXHIBIT A IN BRIEF OF ASSOCIATION OF AMERICAN CLAY PRODUCERS.

The statistics in Exhibit A give an entirely erroneous idea of actual conditions.

The place of honor at the top of the list of points of consumption in the statistics is given to the State of Maine, which consumes not over 10 per cent of the total consumption of the United States, and is the place most disadvantageously located from a rate point of view for the domestic producer.

Next in order on the list and in distance from the domestic producer are the points of consumption under "Port, Boston, Mass." Here is included East Walpole, Mass., and the "Loss per ton to domestic mines to run and compete under present conditions" at this point is stated to be $5.22 per ton.

In compiling the statistics the Association of American Clay Producers has taken all rates from Georgia points. No mention is made in the statistics of the fact that a considerable amount of clay is shipped from Pennsylvania points, which take a lower rate to the North.

We have been endeavoring for some time to sell English clay to Bird & Son, East Walpole, Mass., large manufacturers of roofings and waterproof papers and users of china clay. We recently made them a quotation at our lowest possible figure. Although East Walpole is a point according to the statistics at which the domestic producer must lose $5.22 per ton in order to compete, Bird & Son, who buy their clay from Pennsylvania mines replied to our offer as follows: "* * * The prices on English clay are still prohibitive when compared to the satisfactory domestic clay which we are using."

Under the port of New York, again on the seaboard, and at some distance from the domestic producer, there are listed such points of consumption as Cohoes, Buchanan, Cortland, and Athenia. Although we have been in the business of importing clay for over 80 years, it has never been revealed to us that there is a market for English clay in any one of these localities.

The price of English clay is given in the exhibit as $14.65 per ton at American seaport. This price is intended to cover the lowest grade English clay imported, which, according to the domestic producers, is the sole competing article.

Less than one-third of the imports consist of the lowest grade. The cost of the higher grades runs up to over $20 a ton on present rates of exchange. Only the higher grade domestic clays compete for paper purposes with the lower grade English. The $10 represented in the exhibit as required by the domestic producers applies therefore only to a relatively small proportion of domestic paper-clay production. Lower grade domestic paper clays are sold at prices considerably below $10. Mr. Edgar testified, "Our cost of production and labor varies all the way from $7 to $10 * * *."

The price of $14.65, although only slightly less than the actual price at American seaport for the lowest grade, is based on a rate of exchange of $3.50. Exchange is now about $3.75. At the normal rate of $4.86, this price at American seaport would be about $20, or about $10 higher than domestic clay at the mine on basis of the figures in the statistics.

The figures given for the cost of loading, freight, etc., of English clay are only a little less than actual costs, and therefore we shall pass over this matter, as the error does not seriously affect the conclusion.

The comparative prices given in the statistics fail to take into account that English clay varies in moisture content from 12 per cent to 18 per cent, whereas domestic clay varies from 3 per cent to 8 per cent, a difference of about 10 per cent.

Exhibit A states: "We are reliably informed that certain agents of the English interest have stated repeatedly that there will be 500,000 tons of English clay imported the first six months of 1921."

May we point out that the average total consumption in the United States of paper clay and kaolin for each entire year 1910 to 1919 inclusive was 413,671 tons, and that the maximum consumption in any one full year was 477,816 tons in the year 1919.

Exhibit A also states: "We have been unable to compete at certain northeastern points for years because of high rates."

We respectfully refer to the testimony of Mr. Edgar, referring to shipments to S. D. Warren Co., Cumberland Mills, Me. "We have supplied them for years with a large part, I say a large part, a considerable part, of their requirements."

Under Exhibit A the domestic producers summarize the bases of their request for an increase in the duty to $6 as follows:

Present duty	$1.25
Railroad freight advance to far northern points	2.75
Minimum figure to offset the ballast ocean freight rate on foreign clay and the determined effort to drive us out of business	2.00
Total tariff asked	6.00

The exhibit adds: "We are not asking too much, but we must have what we ask for to live—that is, a tariff of $6 per ton. Our industry is paralyzed, and would be even if there were no business depression, and will be until we get relief."

The "far northern points" given as a basis for the request are not only the points the most disadvantageously situated from the point of view of rates to the domestic producers, but also represent a consumption of not over 10 per cent of the total consumption in the United States.

Regarding the "determined effort to drive us out of business," no such effort has been made. We believe that a statement of sentiment of this kind has no place in tariff considerations.

For the foregoing reasons we believe that the matter contained in Exhibit A falls far short of establishing sound reasons for an increase in the duty.

TESTIMONY OF DOMESTIC CLAY PRODUCERS.

Throughout the testimony of the American producers there are many references to the fact that their business for 1921 has fallen off by 60 per cent. We regret that the business of importing China clay is likewise at present at a low ebb and is running probably 70 per cent below normal. We believe that this curtailment in both cases is due to the general business depression.

Mr. Hadley (referring to the reduction of the tariff from $2.50 to $1.25) asked: "Now, when those rates were cut in two, was there any appreciable difference between August 1, 1913, and August 1, 1914, when the war in Europe began?"

Mr. Edgar replied that he could not give the information, but added: "Our business has steadily increased."

The answer to Mr. Hadley's question is that there was no appreciable difference between August 1, 1913, and August 1, 1914.

After admitting that the paper manufacturers preferred English clay for coating, Mr. Edgar said: "In addition to that, many of the beaters for beating the clay have been installed and were adapted to handling English clays, and they use the English clay for filling."

We respectfully point out that the same beaters are used for domestic clay as for English. No change in the machinery is necessary.

Mr. Edgar testified: "Frequently this has happened recently, that they will send cargoes over here not consigned, and then call on the consumer, and tell him that they have got this quantity of clay, and that they have got to unload it, and ask him what he will give them for it. So, there is no stability for our market."

Considerable interest was shown by the Ways and Means Committee in regard to dumping. Dumping has not taken place to any material extent. During the war over 95 per cent of all the clay producers in England formed an association. The association grades the various clays produced, allots quantities and fixes a minimum price at which each grade must be sold. This price is effective for all markets. Prices have been fixed for six months' periods by the association. They have increased steadily up to July, 1920. The level then fixed now exists. The greater part of the clay brought into the United States is purchased outright by China clay merchants in the United States. They cannot purchase below the associated prices. If any dumping has occurred, it means that the American importer has sold his clay at a loss and contrary to the terms of his contract of purchase.

Mr. Phillips: "English clays are a little whiter. They are a little smoother. The question of the whiteness is no quality whatever. * * * We can turn out here, and we will turn out here as good a clay as they can turn out in England, but we will be stopped from turning it out unless some remedy is given us."

The color of clay is its most important characteristic for the manufacturer of high-grade paper both for filling and coating purposes.

Mr. Longworth: "About how many men are employed in your industry? Can you give us the number?"

Mr. Hayne (president of the Association of American Clay Producers): "I should say anywhere from approximately 7,000 to 10,000. There are approximately 10,000 men which will be involved in the industry."

Mr. Treadway: "What are the average rates to these 10,000 men?"

Mr. Hayne: "Why, it runs all the way from $2.50 to $10 per day."

Ten thousand men working for 200 days in a year at $2.50 per day would make an expense item for labor for domestic paper clay and kaolin of just $5,000,000. The total value of the product, paper clay and kao'in included, for 1918 was $1,850,638. It is not to be wondered at that on the basis of such statements made by the domestic producers they desire and recommend an increase in the duty.

In our brief filed with the committee we stated that we believed that the number of men employed in the production of paper clay and kaolin in the United States was less than 1,000. We can not understand the figure 10,000 given by Mr. Hayne. The Thirteenth Census of the United States, volume 11, 1910, under the title "Mines and Quarries, 1909," at page 322, states that the number of wage earners in the clay mining industry in the United States was 3,901 men, and that they produced a total of 2,159,647 tons of all kinds of clay. The United States Geological Survey Mineral Resources No. 2 for 1909 gives the total production of kaolin and paper clay as 112,813 tons, being about 5 per cent of the total. Five per cent of 4,000 would be 200 wage earners employed in the domestic paper clay and kaolin industry.

Statistical abstract of the United States for the year 1919 states that during the year 1918 there was mined 2,976,361 tons of clay of all kinds, roughly one-third more than in 1909. The number of wage earners is not stated.

We believe that not over 1,000 wage earners can conceivably have been employed in the production of domestic paper clay and kaolin in any one year, and that the actual number was probably far less.

Mr. Treadway (referring to Mr. Hayne's statement quoted above that the average rate to the 10,000 men involved in the industry runs all the way from $2.50 to $10 a day): "Have you the corresponding figures paid for labor in England?"

Mr. Hayne: "Our information is that their cost is easily 60 per cent under ours * * *. Such data comes either from the American consul—I think it comes from the American consul—although I do not know, but it is the best and most reliable source that we could get it from."

The Cornish Guardian and County Chronicle of December 31, 1920, states that "* * * the clay workers are making for substantial increases on the one shilling sixpence per hour recently conceded." At the present rate of exchange of about $3.75 one shilling and six pence equals 27 cents.

We are informed that the wage of the workers in the American clay mines varies from 26 cents to 30 cents an hour, which apparently corresponds with the figure of $2.50 per day given by Mr. Hayne. It follows that Mr. Hayne's information as to a 60 per cent difference in cost is erroneous.

The principal reason for recommendation of increase of duty given by the American producer is protection.

Mr. Hayne: "Under any circumstances in the world, the English people will ship 200,000 tons of clay to America."

The average annual importation of china clay from England for the years 1910–1919, inclusive, was 220,808 tons per annum.

Our conclusion is that the American producer is more concerned with additional profit than with protection.

JOHN RICHARDSON CO.
PAPER MAKERS' CHEMICAL CO.
JOHN W. HIGMAN CO.
MOREY & CO. (INC.).
GEORGE KNOWLES & SON.
A. M. MEINCKE.
L. A. SALOMON & BRO.

EXHIBIT A.

OXFORD PAPER CO.,
New York, January 19, 1921.

DEAR SIR: We understand that you are permitted to file a supplementary brief before the Committee on Ways and Means in respect to the duty on English china clay. It is our earnest hope that after due deliberations the Ways and Means Committee will not find it feasible to increase the present duty for the following reasons:

(1) Domestic clays are not suitable as a complete substitute for English clays for filler purposes in book or printing papers and can not be used for coating papers.

(2) We believe there to be a field for both domestic and English clays to assure the necessary supply for pottery and filler purposes, but due regard should be given to the quality of the product of the different paper manufacturers in respect to the individual desires and needs to make the quality of paper required. This is illustrated by the attitude of this company, as we maintain that in order to continue to standardize on the quality of paper to meet the desires of our customers we can not maintain such standard other than by the use of English china clays, and the Government should not permit any misleading statements on the part of southern producers to act as a detriment to the Oxford Paper Co. against the successful operation of our plant.

(3) We contend that the characteristics of English china clays as compared with domestic southern clays vary to an extent which for making paper of certain grades does not permit of the use of southern china clay, as we do not consider that such clays are competitive with English china clays, and we will not, even though the advantage of price were in favor of the domestic product, use the latter.

(4) It is difficult to draw a line of demarcation between English coating and filler clays, and we understand certain manufacturers of book papers are using coating clays for filler purposes, a character of clay impossible of producing in this country.

(5) Owing to high freight rates to New England, a basis approved by the United States Government, the southern producers should naturally suffer certain disadvantages of location, the same as the paper manufacturer has to contend with, and we strenuously object to disturbing certain advantages enjoyed by the location of our plant near seaboard.

(6) Public sentiment demands not only a reduction in the cost of production of the needful commodities, but a general deflation following the inflation caused by the war. We are informed that the southern clay producers are appealing to the Ways and Means Committee for an increase of duty on English clays to $6 per ton, or an increase of $4.75 per ton over the present duty. If such an increase were granted, our yearly cost of manufacturing paper would be increased approximately $125,000, and it is perfectly logical to assume that such increase would have to be considered in the price of the manufactured product.

PURCHASING DEPARTMENT.
D. B. MORRIS, *Manager.*

EXHIBIT B.

S. D. WARREN CO.,
Boston, Mass., January 19, 1921.

DEAR MR. INCHES: Referring to your call upon the writer regarding the supplementary brief which you are planning to file, we wish to state that on account of the difference in quality of English clay, in comparison with southern clay, we can not obtain as good results in the manufacture of our papers by using domestic clays. We prefer English clay for both filler and coating, and at this time we are investigating to see if it would be advisable to use even a higher grade of English clay than we are now using.

For coated papers we must have English clay in order to keep our papers up to standard. In years past we have used part southern clay for filler, and have often received such poor clay that we have had to reject a large number of cars, as we did not think it advisable to use it, and if the shippers could not have given us shipping instructions on these rejected cars we would have thrown the clay away rather than use it.

We have no contract for southern clay this year, and shall use English clay for filler and coating, regardless of price. Should the duty on English clay be increased, and exchange increased to normal, we would use English clay, and have to pass the additional expense on to the consumer.

E. L. YOUNG, *Purchasing Agent.*

EXHIBIT C.

WEST VIRGINIA PULP & PAPER CO.,
New York, January 19, 1921.

GENTLEMEN: We have your letter with reference to duty on paper-making clay.

As you know, we are manufacturers not only of book and coating paper, but also of sulphite and soda pulps. At the present time both qualities of pulp are

admitted free of duty, and we understand that paper of our grade up to 8 cents per pound is admitted free, and a low duty after that value. It would seem to us no more than fair that, so long as the products we manufacture get little or no protection, the raw materials we use should also be unprotected.

The Government has been and is in urgent need of revenue, and we presume an effort will be made to increase the amount of revenue that has been collected through the tariff. If all rates are raised on an even plane, we do not see that we could in any way object, but, as intimated above, we would object strenuously to a material increase in the duties on clay if nothing is done for the products we manufacture.

As you know, we have plants located at Mechanicville, N. Y.; Williamsburg and Tyrone, Pa.; Luke, Md.; Covington, Va.; and for years we have been using both imported and domestic clays. We use English clay exclusively in the manufacture of our coated paper, also a very considerable amount in the manufacture of book paper. If the duty on English clay is increased, it will affect the price not only of the English clay we use, but doubtless also of the American clay as well. This increased price for clay would be borne not only by ourselves, but all the paper makers in this country, and would result in a higher cost for producing paper of our grades, and eventually be passed on to the consumer.

THOMAS LUKE, *Vice President.*

EXHIBIT D.

BIRD & SON,
East Walpole, Mass., January 20, 1921.

GENTLEMEN: We have your letter of the 19th relative to china clay, but the prices on English china clay are still prohibitive when compared to the satisfactory domestic clay which we are using.

When you have any new quotations on English clay would be glad to know what they are for comparison.

G. M. GRAVES, *Purchasing Agent.*

ROY R. ROSS, REPRESENTING THE GEORGIA CLAY PRODUCERS' ASSOCIATION.

Mr. Ross. Gentlemen, this situation has been described in a general way as a very serious problem.

I would like to give you, as near as I can, the exact figures and facts in connection with the case, and we would like to demonstrate to you what seems to be the trouble and try to tell you what we want with regard to rates as near as we can from all available information about the English clays.

Well, gentlemen, the exact information we have is this: There were 226,876 long tons, 2,240 pounds each, English clay imported into the United States, exported from England to the United States for the first 10 months ended September 30, 1920.

This clay was valued at $2,520,191. That was the customs' declaration in England for the clay shipped, as furnished by the consul general to the Department of Commerce.

Now, that is not under an average value of every long ton shipped to the end of September; the average was $11.11. And, if you figure it down in short tons, it would be a little over 10 per cent less.

Now, gentlemen, those figures are absolutely exact.

Now, it has been stated before that we can not compete with the English clays, with certain qualities of clays, because we can not add the cost of our production necessary in the process of bleaching it and making it equal in whiteness to the English product.

Mr. LONGWORTH. In your opinion, should a tariff such as the gentleman who testified before you suggested be put upon the English clay which is imported into this country?

Mr. Ross. Absolutely.

Mr. LONGWORTH. Is that large enough?

Mr. Ross. That will be, because we are not asking for a prohibitive tariff, sir.

Mr. LONGWORTH. Well, that is what I am getting at.

Mr. Ross. We can give you the exact figures as to just how that tariff figure was arrived at, and why we are asking for that figure.

Mr. LONGWORTH. That is what we want.

Mr. Ross. We have now a tariff of $1.25. To that we want to add $4.75, and make a total of $6.

Mr. YOUNG. Is any part of that exchange?

Mr. Ross. No, sir. It is figured upon a dollars and cents basis, so exchange is eliminated.

Mr. YOUNG. Well, if it is figured upon the basis of the British exchange, the value would be affected.

Mr. Ross. It is not figured upon the British exchange except with regard to the ocean freight rate. We have figured that at $3.50.

Mr. YOUNG. Well, suppose the English exchange should change considerably, how would that affect the situation; would they still import clays?

Mr. Ross. Absolutely; the exchange has not affected the situation as far as the tonnage is concerned. The exporters adapt themselves to the price that they have to meet to overcome our competition. Just now there is a variation in the purchases in this country. We can buy these English clays at our own figures now.

Mr. HADLEY. If we should establish a rate of $10, substantial importation would still come?

Mr. Ross. That is entirely possible. That I could not tell anything about, because it is problematical and mythical.

Mr. LONGWORTH. Certain people would prefer the English clay and they would import it?

Mr. Ross. Yes; certain people would prefer it.

Mr. LONGWORTH. Now, in your opinion, under this $6 tariff, what proportion of the American consumption do you think would be imported?

Mr. Ross. With a $6 tariff at the present time the importation into the United States, I imagine, would be a little over half.

Mr. LONGWORTH. That is to say, that the $6 tariff would not reduce the total consumption, but the imports?

Mr. Ross. Yes, sir. That is not an exclusive tariff, but it will bring in about $2,000,000 revenue. For most northern points our railroad freight rates have advanced an average of $2.75 per ton. We have got a tariff of $1.25 now, and that gives us $4. That is what it would have to be to put us where we were before the 26th of last August. We are asking for a minimum figure to offset the ballast ocean freight on foreign clay and the determined effort to drive us out of business of $2. Now, we are asking that $2 as an addition to offset that dumping proposition and to offset this $3 freight.

Now, we have a freight rate of $9, whereas the English freight rate to Portland is $3. That is figured on 17s. 6d., which has been the freight rate for freight coming in during the last 60 days.

So if we are going to overcome this English importation we have got to get nearer their cost of production, and we have got to have this additional tariff in order to do it.

We can not compete in shipping clay to Portland, but we can ship it to the Southern States.

Mr. LONGWORTH. If you had an effective antidumping law, would you need the tariff as high as $6?

Mr. Ross. That antidumping law, I hardly think, would do it, as it would be a very easy proposition to overcome at times, because they will show orders which have been obtained for the material, and unless it is really a legitimate proposition it is difficult to prove the value.

Mr. LONGWORTH. I understood you to say that you wanted a certain amount; that you wanted $6 as a protection against something.

Mr. Ross. Yes, sir.

Mr. LONGWORTH. Now, if we had an effective antidumping law would you need the amount you estimate?

Mr. Ross. Yes; we would need it to overcome the great difference between the English and the United States cost and the difference in wages paid in the English mines and in our mines. If we are to operate our mines, we have got to get this relief.

This clay is now coming over here, and it is being delivered at our ports at $14.56 a ton. And our losses, the losses to some of our people in our market, is from $3.41 inland in Massachusetts to $5.88 at Boston and $4.50 loss in Maine up to $5.22 in Maine, and in order to compete with the English clays at the present prices we are now asking for $4.75 duty, when our loss is over $5 a ton at a number of points to which we are shipping.

Mr. LONGWORTH. Is the English market stable or does it vary?

Mr. Ross. Well, one of our best customers for American clays uses a large amount of English clay, and he told me personally not long ago that no matter what the price we made that he could not buy clay from us, because he could get English clay at his own price.

Mr. LONGWORTH. Do you know whether or not the price in the English market remains stable or is varying?

Mr. Ross. That I can not answer, because I do not have the information.

Mr. GARNER. Does it cost more to produce the clay in this country than it does in England?

Mr. Ross. Absolutely.

Mr. GARNER. Well, you are not asking for enough tariff to let you do business in Portland, Me., because the freight rate—you said a minute ago that it cost you $9 a ton to deliver the clay to Portland, and that it cost the Englishman $3 a ton to deliver it there?

Mr. Ross. Yes, sir.

Mr. GARNER. Now, if you are given this additional tariff, this difference in the freight to Portland, it still is going to put you out of business so far as Portland, Me., is concerned?

Mr. Ross. Well, sir, we are not stating the prices we will have to get in Maine. We are figuring a small, reasonable margin of profit. We can only figure against our selling price in the country, because we do not know the English cost of production.

WILLIAM BURGESS, REPRESENTING THE UNITED STATES POTTERS' ASSOCIATION, TRENTON, N. J.

The CHAIRMAN. Mr. Burgess, you were recently in Japan and China, looking up the costs, and for the benefit of the committee, will you tell us something about your experience and the information you obtained while over there? I don't want to interfere with your line of argument, but please refer to that before you complete your remarks.

Mr. BURGESS. I had a most interesting and pleasant experience, assisted very largely by the kindliness and courtesy of the largest pottery manufacturer in Japan, and one of the largest in the world, employing in the neighborhood of 4,000 people. We went over every detail of the business, from the raw material to their profit sheets. They were very frank, indeed, and a great many confidential matters were spoken of, of which, of course, I am not at liberty to speak. They knew, however, who I was. I went there on their invitation, and they knew that I was getting facts of this particular occasion for the Department of Commerce. Secretary Redfield, knowing I was going there, asked me to get what information I could to supplement the report on pottery that was made by the department a few years ago. I found that the competition was not so seriously dangerous as I had anticipated, for various reasons. Before my visit I based my fears more particularly on the very great difference in the cost of labor; but I found, on going into details, that they had also handicaps which explained the reason why we had not already been flooded and driven out of the business. Their coal costs them a good deal. They use the same kind of clay that we do from England. At that time it cost them more than double what it cost us. A few items of that sort offset to a slight degree the very great difference in the cost of labor.

I found the factory equipped with the most modern machinery obtainable in the world, some from France, some from Germany, some from England, and some from my own town of Trenton. I felt quite at home in the midst of the machinery. They had every modern device to produce their goods, and they were working with such efficiency as I have never seen in any pottery in the world, and I have visited a good many of the potteries of the world. The efficiency of the labor was, in some departments, greater than the efficiency of the same class of labor in America. In other lines it was less efficient. But, on the whole, I should say that the average efficiency would almost equal the American efficiency in the pottery industry.

The cost of labor, the day wage that Mr. Wells referred to being about 2 yen, or $1 a day—I did not find a single operative in the factory earning that much. The highest-paid man at the time that I visited it, just a little over a year ago, was 1 yen 70 sen, or 85 cents a day.

As to the exportations of the goods from Japan, they were rapidly increasing. Mr. Walker made the statement that the rapid increase in the importations referred to, I think, Mr. Green, was accounted for on account of the increase in price. The importations of Japanese goods for the 10 months of the calendar year of 1919 from Japan were $1,448,447. For the 10 months of 1920, up to October, they were

$3,341,664. So that there was an increase there of $2,000,000 on a base of $1,448,000.

Now, I know, as a matter of fact, that the Japanese goods during that time increased only slightly. They increased considerably, and I think possibly Mr. Walker's figures are about correct, from the low base from which they started up to the present value, but that is the way they have increased throughout the world.

I do not know that there is anything else particularly interesting.

The CHAIRMAN. What are the living conditions there compared with conditions of our laboring men, in the same class of work?

Mr. BURGESS. They are far inferior to our class of labor in living conditions. They live largely on rice and cereals and fish, and their housing conditions are extremely poor. But in this particular factory there is every possible care extended to the operatives. For example, they have a day nursery in the place. The day I happened to be in there there were fifty-odd children, with three attendants looking after them. There were 18 babies. There was a nurse looking particularly after those babies.

In another part of the plant there is a mill. They bought cereals, grain, by the carload, and distributed them to the help at cost price. So that there was every consideration given to the help.

That is one side of the picture. The other side is the old-fashioned way of manufacturing pottery ware, which is in existence there, and a large bulk of the Japanese goods of the old type, as we all know the goods, comes from the outlying districts, communities where they make nothing but pottery. One household will make molds, another will make the cups, another will make the saucers, and another the bowls, etc., and then they carry them all to the community kiln. The operator of the kiln is the big man of the town.

Then there is a business center, and those who have made the ware merchandise it through this one man. American buyers go to these out-of-the-way places and make their bargains in such a way that it is a difficult thing to keep track of the real home market price. It is almost impossible to do so.

Mr. RAINEY. I have before me here a report to the British Government, from the British vice consul, describing conditions over there, in which he says:

> In discussing the value of the wages paid, the conditions in 1912 were taken as a basis. Striking changes occurred during the war. During 1916 the industry developed at such a pace that for once the supply of labor was temporarily quite inadequate. Pay then increased rapidly, though as far as possible increases were given in the form of bonuses or of cheap rice.

Did you learn anything of that while you were over there?

Mr. BURGESS. He is speaking in a general way, sir, but I looked into that thing, and I am positive of the fact that rice was not given by this large factory, but in the smaller places they have their community centers where they may give them rice.

Mr. RAINEY. That is, they sell them rice cheaper than they could get it in the market?

Mr. BURGESS. At cost.

Mr. RAINEY. Cheaper than they would possibly buy it from the rice vendor?

Mr. BURGESS. Yes. The consequence was that particular factory always had the call on the best class of labor in the neighborhood.

I say nothing in contradiction of that, because I believe that is true in certain lines, but not in the pottery lines.

The CHAIRMAN. How many hours do they work per day?

Mr. BURGESS. The potter laborers work—I am not quite sure whether it is 12 hours in that factory. In the country districts they work 12 hours. I think in this particular very large factory they work a little less time—10 or 11 hours—but I could not answer that positively. My colleague, Mr. Wells, has very fully, ably, and frankly stated to you the American potters' attitude toward the subject of the tariff as it presents itself to us at the present moment, and I will not take up your time in attempting to add anything to what he has said, but desire to turn your attention for a few moments to the subject of the present administration of the law.

Mr. RAINEY. May I call your attention to another thing in this report here, in regard to working hours?

The Japanese workman works long hours, 10 to 12 on an average, with few holidays, generally two to four days a month. During the war factory employees have been doing overtime in addition. There are no statistics, however, to show the number of days actually worked by each workman.

Is that substantially the fact as you found it?

Mr. BURGESS. It depended upon the industry. The textile industry I took a look into. I found that they were working 12 hours a day regularly.

Mr. RAINEY. He says:

From inquiries which I had made from various sources it would seem that absences from illness or other cause are frequent, and the question arises whether the system of long hours really means increased output when attendance is irregular.

Mr. BURGESS. A few weeks ago I had the privilege of presenting to you a matter which I understand has created much discussion, some contradiction, and a great deal of misunderstanding, i. e., the permitting of various kinds of German goods to enter this market on the payment of duties based on values far below the actual purchase price.

This state of affairs has been brought about, in my opinion, by misapprehension of the intent of Congress as expressed in the administrative features of the law.

In paragraph R of section 3 of the tariff act of October 3, 1913, it is stated clearly that the duty shall be assessed upon the "actual market value or wholesale price thereof at the time of export to the United States in the principal markets of the country from whence exported," and then it defines clearly what that market value shall be in these words, "that such actual market value shall be held to be the price at which such merchandise is freely offered for sale to all purchasers in said markets in the usual wholesale quantities at the price which the seller, shipper, or owner would have received or was willing to receive for such merchandise when sold in the ordinary course of trade in the usual wholesale quantities."

The Board of General Appraisers has narrowed this definition, making the law read in intent and effect, "that such actual market value shall be held to be the price at which such merchandise is freely offered for sale to all purchasers in said market for home consumption."

This decision has been disastrous to the revenues of the Government, as duties have been collected on only a fraction, and in some cases a small fraction, of the actual price paid for the goods in Germany by the American importer. I am informed by cutoms officials that in some cases the duty is charged on but 10 per cent of the actual purchase price of the merchandise.

The question of the foreign value of German merchandise is extremely complicated, both on account of the various methods of increasing the value of the merchandise as the value of the mark decreases, and because of the differing values for home consumption and for export. It would almost seem as if there was some method in their madness in this direction and an attempt on the part of the various German trade associations or "bunds" to regulate the amount of duty this Government shall collect on their products.

It is also difficult to get at the truth regarding some of the so-called Government requirements. It has been definitely stated that on all pottery sales, the manufacturer is required by the Government to add 150 per cent to the price he would otherwise be willing to sell to the American buyer and that the Government in turn levys a tax of 90 per cent upon this added 150 per cent, export addition as an excess profit tax.

To make this matter as simple as possible I will endeavor to illustrate just what this method of procedure means in the way of a revenue loser and importer encourager. I will eliminate all the intermediate steps leading from the prewar price to the present prices and give you the resultant figures.

As a concrete illustration I will take this white china 24-centimeter plate.

Before the war this article was sold on a list price of 3.30 marks per dozen for both home consumption and for export, the mark value being normal; i. e., $0.238 per mark.

On account of the increased cost of production and the ever-decreasing purchasing power of the mark, this article is now sold for 49.50 marks per dozen for home consumption.

When an American buyer attempts to purchase this article he can only effect a purchase through the medium of the American dollar upon an arbitrary basis of prewar mark value reckoned at $0.25 to the mark, so that he has to pay 3.30 marks per dozen at $0.25 per mark in American money plus the Government addition of 150 per cent, or $2.06 per dozen.

On entry of these goods at the United States customs ports the home market value of 49.50 marks is claimed to be the dutiable value. It is therefore necessary to reconvert the dollar value into mark value. At the present time one American dollar will purchase 70.6 marks; therefore, multiplying this $2.06 by 70.6 you have the value in marks; i. e., 145.44 marks. One dozen plates therefore cost the American buyer 145.44 marks, but, as above stated, the same dozen plates cost the German buyer for German consumption only 49.50 marks, which is claimed to be the foreign market dutiable value. It is therefore necessary to deduct 66 per cent from this actual purchase price of 145.44 marks to make the foreign market value, which figures out 49.45 marks.

The duty upon this class of merchandise under the present law is 50 per cent ad valorem. If the duty was collected on the actual

purchase price, our Government would be receiving the equivalent to 72.72 marks, or $1.03, whereas it now being assessed on the foreign market value of 49.45, the Government received only 24.72 marks, or 35 cents, or a loss of $0.68 on every dozen plates of this class brought into the United States, and the domestic industry is losing two-thirds of the protection intended, even under the present Democratic revenue law. The landed value of a dozen plates would therefore be $2.06 plus $0.35, or $2.41. But to this price must be added package charges and duty thereon, land and sea freight, landing charges, etc., the exact amounts I can not give you at this time, but if we add 100 per cent to the home value cost of the goods in Germany we surely are making ample allowance for these incidental charges. One hundred per cent of $0.825 would be $0.825, making the total landed cost $2.88. The closest selling price of a similar American product, which I hold in my hand, is $3.90 per dozen.

Mr. DICKINSON. That is the American plate?

Mr. BURGESS. That is the American plate, and the American selling price is $3.90. The German plate, with the 150 per cent duty added, with the duty charged on the low rate, can be landed here for $2.88.

Mr. GARNER. Let me ask a question for the record, to see if I get it in my mind. The prewar price for a dozen of those plates was 3 marks plus?

Mr. BURGESS. Yes, sir.

Mr. GARNER. The present price on which the duty is assessed is 49 plus?

Mr. BURGESS. Yes, sir.

Mr. GARNER. That is 16 times as much?

Mr. BURGESS. Fifteen times.

Mr. GARNER. And the mark now is worth what?

Mr. BURGESS. One forty-one.

Mr. GARNER. Then there is not much difference in the duty from what it was before the war. The mark exchange rate is about 18 to 1, and the duty is assessed of 15 to 1. Mr. Kelley, if you will remember, was before us from the Treasury Department. I think you know him. His ancestors had something to do with the tariff, I understand. His testimony was that you could buy just about as much goods in Germany now for $1,000 as you could before the war, and that the assessed revenue was based upon that fact, and your statement bears out absolutely what he says.

Mr. BURGESS. Yes.

Mr. GARNER. So we are not really being hurt so much by this exchange rate after all, because the cost of the product over there is so much greater than it was before the war—fifteen to sixteen times what it was before the war in this pottery industry alone.

Mr. BURGESS. The law distinctly says that the duty shall be paid on the price at which this merchandise is sold to all purchasers.

Mr. GARNER. May I ask, Mr. Burgess, who is violating that law?

Mr. BURGESS. The Treasury officials.

Mr. GARNER. Haven't you a board of appraisers?

Mr. BURGESS. Yes, sir.

Mr. GARNER. Have you resorted to that court?

Mr. BURGESS. Yes, sir.

Mr. GARNER. What did they say?

Mr. BURGESS. And it is on their decision that the Treasury Department is acting.

Mr. GARNER. I understand the appraisers are appointed for life, and they will continue in office and will probably make the same decisions, whether there is a Democratic or a Republican administration, so they are really complying with what the courts have said in the law.

Mr. BURGESS. It is a misinterpretation of this particular statute.

Mr. GARNER. That is your opinion. Of course, the courts have rendered their opinion, which is different from yours.

Mr. BURGESS. I take that up just a little later.

Using this cup and saucer in the same way as the article that I was speaking about the other day, I find that on every dozen of these cups and saucers the Government is losing about 71 cents, basing the revenue on the present market value instead of the actual price paid. This cup and saucer can be landed to-day under this method at $2.95 a dozen, whereas this American article sells at $3.72 a dozen. I think possibly that explains how that 150 per cent they are adding——

Mr. GARNER. Mr. Burgess, following up our discussion about court decisions, we had before us not long ago a witness from the Treasury Department, who told us that the Board of Appraisers always interprets the law so as to get the most revenue. You are here saying that they interpret the law in a way to lose the most revenue. He says that they tried to get the most money into the Treasury from the importations. That was the contention of the gentleman who was before us not long ago, explaining about the decisions of the court of appraisers always trying to get a lot of money into the Treasury. Your contention is that they have construed the law so as to lose a lot of money to the Treasury?

Mr. BURGESS. That has not been my experience with the Board of Appraisers.

Using a standard cup and saucer, which I show you, known as a white china ovide tea (the cup and saucer being considered one piece) and carrying it through the same process of figures, I find the American purchaser pays $2.14 per dozen cups and saucers in the German factory. The duty collected thereon is $0.36 instead of $1.07, a loss to the Government of $0.71 on every dozen teas of this kind imported—making the total cost $2.50 per dozen. Adding to this for packages, freight, etc., 100 per cent or $0.31, you find the total landed cost to be $2.95 per dozen. The lowest American selling price for a similar American product is $3.72.

It has recently been pointed out to certain Government officials that this regulation laid down by the German Government is not intended to apply only to goods for export, but it was learned that if the American buyer desired to purchase such goods at the home-consumption value for resale in Germany he would not be able to do so, as the only purchasers permitted to buy without the Government addition are Germans purchasing for German consumption.

It would seem, therefore, that all purchasers other than the Germans buying for sale in their own country had to pay the advance price, all of which goes to still further show the unfairness of the

present method of assessing duties. As stated on a previous occasion, the little word "all" in the provision of paragraph R above referred to, has been lost sight of in the decisions of the Board of General Appraisers upon which the present procedure is based. The American buyer is one, and a large one, of the "all purchasers." The best price at which he can buy is, therefore, the lowest "price at which such merchandise is freely offered for sale to all purchasers," and consequently is the dutiable value of the merchandise, according to the letter and spirit of the act.

Government statistics are thus made grossly misleading. For example, the Government import statistics show that for the 10 months of the calendar year of 1919 imports from Germany amounted to $558,432, whereas the imports for 1920 were $621,712, showing only a slight increase, but when one goes deeper into the facts he finds that the 1919 imports were largely goods held in transit or shipped on prewar orders, whereas the value of the goods imported in 1920 was based on the dutiable value of the goods carrying the low foreign-market value. If, however, the actual purchase price in Germany of these goods had been taken the record would show approximately $1,800,000 of imports from Germany and would indicate that in this industry Germany will not be slow in recovering a large portion of her former American business.

No one can foretell how long it will take before international finances shall be stabilized or approach the normal, but I do not believe that the most optimistic thinks that that day is close to the dawning.

What, therefore, is the remedy? A tariff rate that would be protective against the cheapest-cost country would be prohibitive against the higher-cost countries.

An antidumping law based on foreign values would not be effective, provided the foreigner sold to all his customers both for home consumption and export at the same price.

It is not desirable and we do not want to exclude foreign merchandise from this country, but we do desire that its importation should be so regulated as to give the American producer, with the higher standard of living and higher ideals, at least an equal chance in our own markets with those of foreign countries producing at low cost, with low standards of living and lower ideals.

We desire most earnestly that whatever duty shall be placed upon any foreign product that that duty should act equitably and uniformly as against all foreign countries.

There is but one way of which I know that this result can be secured, that is by changing the base for assessing duties from the foreign market value to the value of similar competing products manufactured in this country. This is by no means a new idea. As Mr. Thos. O. Marvin, of Boston, recently pointed out that Henry Baldwin, of Pennsylvania, chairman of the House Committee on Manufactures, speaking of the tariff bill of 1820, said:

> The mode of ascertaining the value of goods on which a duty is to be assessed has been attended with much difficulty, and almost constant war between the merchants and officers of the customs, and has been often changed. The original mode of ascertaining the value "at the time and place of importation" prescribed by the act of 1790 was the fairest and most equable; as an ad valorem duty it was in fact what it purported to be—so much per cent on the value.

In April, 1830, Rowland C. Mallory, of Vermont, the chairman of the Committee on Manufactures, discussing the bill to prevent revenue frauds, said:

You can not reach the person who swore falsely to an invoice in a foreign country. There he is perfectly safe. The truth is, sir, that the foreign valuation is the rotten part of our system.

Henry Clay offered an amendment to the then tariff law that after 1842 the duties should be assessed on a valuation made at the port in which the goods are first imported. In debate, he said:

Now the valuation is made in foreign countries. We fix the duties and we leave to foreigners to assess the value on articles paying ad valorem duties. This is an anomaly, I believe, peculiar to this country. It is evident that the amount of duty payable on a given article subject to an ad valorem duty may be affected as much by the fixation of the value as by the specification of the duty, and for all practical purposes it would be just as safe to retain to ourselves the right to declare the duty and allow to him the privilege to assess the value.

Mr. DICKINSON. Practically avoiding the duty thereby?

Mr. BURGESS. Yes; by assessing his own value on it, putting his own value on it. The foreign value it is very difficult to find. [Reading:]

Now, sir, it seems to me that this is a state of things to which we should properly apply an efficient remedy, and no other appears to me but that of taking into our own hands both parts of the operation—the ascertainment of the value as well as the duty to be paid on the goods. If it be said that we might have in different ports different rules, the answer is that there could be no diversity greater than that to which we are liable from the fact of valuation now being made in all the ports of foreign countries from which we make our importations, and that it is better to have the valuation made by persons responsible to our own Government and regulated by one head than by unknown foreigners standing under no responsibility to us.

President Fillmore in his annual message, December 2, 1850, speaking on the prevention of undervaluation, said:

As before stated, specific duties would, in my opinion, afford the most perfect remedy for this evil, but if you should not concur in this view, then as a practical remedy I beg leave respectfully to recommend that instead of taking the invoice of the article abroad as a means of determining its value, where the correctness of which invoice it is in many cases difficult to verify, the law be so changed as to require a home valuation or appraisal, and be regulated in such manner as to give, as far as practical, uniformity in the several ports.

I think the words of Assistant Secretary of the Treasury French, when addressing the Tariff Commission, might be well addressed to you at this time. He said:

I think the question whether your commission should not recommend a home valuation instead of a foreign valuation is one of the most important you should consider. Why should we go to India or England or anywhere else to ascertain what the value is or was there rather than to take the value in the port of importation or in the principal markets of the United States? Which would be the better term or better method? It seems to me that it is one of the curiosities in the law that such a provision should have existed from 1799 down to the present time; and I think it only exists now because nobody has really thought it possible to change a thing that has existed so long. I think that any person who should be told for the first time that we look abroad in order to find out what duty we should assess upon an imported article would be very much puzzled as to what reason there could possibly be for so doing.

I presume the day set by for hearings on the administrative features of the law will be the proper time to discuss this proposition, but as

a remedy for the evils that exist, such as I have attempted to describe, it would seem to me to be the psychological time to effect such a change in our method of assessing values.

That would not remedy the difficulty entirely between the low-cost country and the high-cost country. The only way that that seems practicable, without infringing on the rights of one nation, would be a maximum and a minimum tariff, making the maximum the general tariff and the minimum the conventional tariff, not a maximum as a penalty, but a minimum for good behavior. I want, before I close, to——

Mr. RAINEY. Just a question there. Your discussion is a very interesting one. I just want to get your viewpoint. Do you think the tariff ought to be assessed upon the American value of the foreign article computed in the American port? Is that your idea?

Mr. BURGESS. Yes; my thought is to have it computed on the basis of the American value of the American competing article.

Mr. RAINEY. Of the American competing article? Now, I am wondering if you can do that. Say the value of the American competing article is $2 at the time you make that valuation for the purpose of fixing the tariff, then your article comes in and it is worth $2 in New York. Now, your tariff is, we will say, 50 per cent. You apply a tariff of 50 per cent on $2, and then you add 50 cents tariff. That would make $2.50 on that article. Would not the American manufacturer increase his price then to $2.50, or nearly that? Would not that furnish him an excuse for doing it, so far as this competing article is concerned? Then when he does that the next time that article comes over here you would have to value it at $2.50, so that as a result of that you would keep on pyramiding the cost until there is no limit to the American price. There would be no limit to the price that the American producer could put on the article except the competition which other manufacturers might give him, and so far as competition abroad is concerned, there would not be any, and ultimately we might lose importation revenues and everything else from abroad, if we go back 131 years and adopt the system that was in force in 1790 for about 10 years, until the present system was put in effect, which has been in force ever since.

Mr. BURGESS. The American article—take this article that I hold in my hand, of $2 American value, the invoice price, say, from Japan or any other country, would be $1, and the rate of duty would be assessed on a 50 per cent basis, based on the American valuation.

Mr. RAINEY. Based on $2?

Mr. BURGESS. On the $2. That would be $1. So that the foreign article coming in would then have to pay $1 duty on top of the $1 that it cost to bring it up to the American value of $2, and there it would stay. If the American manufacturer wanted to make that $2.50, the foreigner would still bring his goods in at the $1, and would have to pay, on the American value, $1.25.

Mr. RAINEY. He would pay more.

Mr. BURGESS. He would pay $1.25, so that would bring the foreign article in at $2.25, against the American article at $2.50, and so one would check the other. The American manufacturer could not raise his price, because he is checked by the price at which the goods are purchased from the foreign manufacturer.

The CHAIRMAN. We could greatly reduce our ad valorem rate by placing the value of the imported article here?

Mr. BURGESS. Yes, sir.

The CHAIRMAN. You take the cup that you mention there now. Suppose that sells in the United States for $2, and is sold over there for $1, imported at $1 cost. You see, to get enough money at $1 on that, to bring it up to our value, we would have to put on 100 per cent.

Mr. BURGESS. Yes, sir.

The CHAIRMAN. Whereas, if it was made the duty on the value of 50 per cent ad valorem, it would give you the same amount of money?

Mr. BURGESS. Yes, sir; exactly.

The CHAIRMAN. You lower the ad valorem and you get the same amount of revenue.

Mr. BURGESS. With the possibility of collecting it.

The CHAIRMAN. Yes.

Mr. BURGESS. Before sitting down, I have just a few figures that I think will be of interest. I have hurriedly computed the average wages per hour of the various kinds of pottery working people, taking as a basis our own United States labor statistics, and not from any factory or group of factories. The United States average, all classes, men and women, common labor and skilled labor, is 70 cents an hour. Great Britain, the same group, 18 cents an hour. France, 15 cents an hour. Germany, 6 cents an hour. Japan, from 4 to 5 cents an hour. That is, I can take the American dollar and buy an hour's worth of labor in America for 70 cents. I can take the same American money and go to England and buy an hour's labor for 18 cents, to France for 15 cents, to Germany from 4 to 7 cents, to Japan from 4 to 5 cents.

Mr. DICKINSON. Is the quality of the ware that comes in about the same as our American ware?

Mr. BURGESS. I am glad you brought that out, because of a statement that I think Mr. Walker made, that the Japanese were not competitive goods with the American. This is a Japanese article, coming to the western part of our country. It takes quite an expert to see any particular flaw in that particular piece of china cup and saucer. I was on the War Industries Board during the war, and it was the request of the Japanese importer that we should put Japanese ware on the warships, and these goods were sent to us to pass on as to their merits and the advisability of doing so. That particular cup and saucer was sold in Japan for 92 sen, or 46 cents a dozen. Now, add 150 per cent to that price, and you get about a landed price here of $1.15 per dozen. The American price of this one, bear in mind, was $3.72.

The CHAIRMAN. What difference is there in the quality of the two?

Mr. BURGESS. For every practical purpose there is no difference. There is a little difference in the color. That, you can see, is slightly bluer. That is more of a cream color.

Mr. DICKINSON. The quality is about the same?

Mr. BURGESS. The quality is about the same, as you can tell from the ring of that cup when struck.

FLUORSPAR.

[Paragraph 76.]

BRIEF OF THE FLUORSPAR PRODUCERS OF ILLINOIS.

The undersigned, being producers of fluorspar in the State of Illinois, hereby petition Congress to establish an import duty of $5 per ton on fluorspar, one of the commodities now included in paragraph 76 under Schedule B of the tariff act of October 3, 1913, and in support thereof submit the following facts:

(1) *Fluorspar is absolutely essential in the manufacture of open-hearth steel.*—Open-hearth steel can not be produced without the use of fluorspar. There is no known substitute. It acts as a flux; liquefies the slag and makes it fusible. Open-hearth steel comprises about 75 per cent of the entire steel production of the United States. About 85 per cent of the total fluorspar produced is so used. The remainder is principally employed in the production of hydrofluoric acid and in the manufacture of enameled and sanitary ware.

(2) *While fluorspar is essential to the production of open-hearth steel, only a relatively small amount is used.*—The amount of fluorspar used by the steel companies of the United States varies from 5 to 10 pounds to the ton of finished steel. An advance of $1 in the price of fluorspar means an additional cost of one-fourth cent to one-half cent for each ton of finished steel. An increase of $5 in the price of fluorspar means an additional cost of 1¼ cents to 2½ cents for each ton of finished steel. It is manifest, therefore, that a slight difference in the cost of fluorspar will not affect the cost of steel to the ultimate consumer. On the other hand, the steel companies are vitally interested in securing a continuous domestic supply of a necessary material.

(3) *National security requires an adequate domestic supply of fluorspar.*—The lessons learned during the recent war will not be quickly forgotten. The United States will never again be satisfied to rely upon any foreign country for a supply of an essential raw material. After this country entered the late war early in 1917, a survey was made to determine the extent to which the United States must rely on foreign sources for war essentials, and attention was quickly directed to fluorspar. The matter was taken up by the War Department and the Bureau of Mines, and strong pressure was brought upon the domestic producers to increase production in an effort to meet the country's needs. By placing in operation practically every known deposit in the United States, the producers during 1917 and 1918 were just able to meet the demands of the steel companies. This was done in many cases at the expense of future production. Fluorspar was finally included in the so-called administration minerals bill passed by Congress October 5, 1918, the title to which provided as follows:

"To provide further for the national security and defense by encouraging the production, conserving the supply, and controlling the distribution of those ores, metals, and minerals which have formerly been largely imported or of which there is or may be an inadequate supply."

(4) *Domestic production of fluorspar prior to and during the war.*—Gravel fluorspar, which is the grade used by the steel companies, was not much in demand until the open-hearth process of manufacturing steel was substituted so largely for the Bessemer process. As additional open-hearth furnaces were constructed, the demand grew rapidly. During the years 1912 to 1916, inclusive, there were 619,920 tons of fluorspar produced in the United States, or an average of 123,984 tons per annum. In 1916 the production amounted to 155,738 tons. Under war pressure, this production was increased in 1917 to 218,829 tons, and in 1918 to 263,817 tons.

There were practically no new ore deposits discovered or put into operation during the entire period of the war. The increased supply in 1917 and 1918 came almost entirely from the increased production of ore bodies theretofore located. These ore bodies are being rapidly depleted.

(5) *Sources of domestic production.*—In 1918, according to the Government reports, there were 13 operators in Illinois, who furnished 49.57 per cent of the domestic production; 54 operators in the State of Kentucky, who furnished 33.61 per cent; 37 operators in Colorado, who furnished 14.46 per cent; 7 operators in New Mexico, who furnished 1.75 per cent; 3 operators in New Hampshire and Washington, who furnished 0.88 per cent; 4 operators in Arizona, who furnished 0.20 per cent; and one producer in Utah, who furnished 0.03 per cent.

(6) *Sources of imports.*—Gravel fluorspar imported into the United States for use as a flux in the manufacture of open-hearth steel has come almost en-

tirely from England. It is hand picked from dumps which have accumulated over a long period of time at lead mines in Derbyshire and Durham, or is mined at very low cost in open cuts or shallow workings. On account of the fact that returning vessels need ballast, it has always enjoyed a very cheap ocean freight rate to this country.

(7) *Difficulties of domestic production.*—Fluorspar in the United States is found in faulted fissure veins, and the ore bodies pinch laterally and vertically. The ore bodies are small compared with other minerals. On account of the treacherous character of the deposits, they can not be located either by churn or diamond drilling. The only way that the extent of a fluorspar deposit can be determined is by going to the expense of sinking a shaft and driving levels. On account of the character of mining required, several years are necessary to put a mine on a substantial producing basis even after the deposit has been determined. It follows from these facts that investors will not take the risk of exploring for and opening up fluorspar mines unless in case of success they are assured of a fair return over a period of years. It is conceded that fluorspar deposits lessen both in quantity and quality with depth. The better grade ore is usually found on the shallower levels. As the deposit goes deeper it narrows in width and fluorspar begins to be replaced by calcite or other rocks and minerals. This in turn complicates the milling problem and requires more expensive and intricate milling plants and machinery.

Most fluorspar mines encounter water at lower levels, which must be pumped continuously, increasing largely the mining cost. In the Illinois field most of the production comes from mines each of which is required to pump to the surface 700 to 1,200 gallons of water per minute.

The largest deposits of fluorspar located in the United States are found on the so-called Rosiclare vein in southern Illinois, close to the Ohio River. Every one of the operating mines on this vein is subject to being flooded by overflow water from the Ohio River, and it has required as long as six months to pump out one of these mines after being flooded.

Of the 13 operators in Illinois during 1918 only three have a railroad connection. The others are compelled to haul the ore and supplies from 4 to 12 miles over roads impassable for about five months in each year, and some of these mines are forced to transport their ore 20 miles by river before reaching a railroad connection.

Of the 54 producers in Kentucky in 1918 only two have a railroad connection, most of the others being situated from 4 to 14 miles from a railroad point. Both ore and supplies must be hauled over bad dirt roads which are entirely impassable for about five months in each year.

In New Mexico some of the mines are as far as 30 miles from a railroad and are compelled to haul over desert roads.

In Colorado, of the 37 operators reporting to the Government in 1918 only one has a railroad connection, most of them being about 18 miles from a shipping point.

(8) *Fluorspar prices and previous tariffs.*—In the earlier years, fluorspar production in the United States was a crude affair. The principal production came from relatively large bodies on the Rosiclare vein at shallow levels and was cheaply produced. The necessity for encouraging this industry was recognized by Congress, and in the tariff act of 1909 in section 90 of Schedule B, a duty of $3 per ton was placed on imported fluorspar. The average price at that time in this country was about $6 per ton at the mines. This was due, as above explained, to the fact that the principal production came from a few mines favorably located, producing from relatively large bodies at shallow levels, with little equipment and at low cost.

Under the so-called Underwood Tariff Act, passed by Congress October 3, 1913, in section 76, Schedule B, the import duty on fluorspar was reduced to $1.50 per ton. At that time the price of fluorspar in the United States was about $6.37 at the mines. It was impossible for the domestic producers to continue the production of fluorspar at the prices theretofore in effect, on account of the rapidly changing conditions. Up to that time, as shown by the Government reports, fluorspar production was in the hands of a few favorably located operators and the cost of long wagon hauls had not entered into the production figures. Furthermore, even in the more favorably situated mines the shallower levels were exhausting, and mining had to be carried to deeper depths, with the ore bodies narrower and the quality poorer. The mines reached levels where flooding from the Ohio River became serious. Large quantities of normal water were encountered, which had to be pumped. Additional and more com-

plicated mills had to be erected. With smaller ore bodies, additional water, more waste, more expensive equipment, additional and larger shafts, the production cost of fluorspar increased very rapidly and the hazards attendant on its production became more serious. In order to supply the needs of the country, deposits were located and opened at long distances from the railroads. In view of the character of the veins, it was necessary to support the stopes and also the levels between the walls by hardwood timbers ranging from 6 to 30 feet in length and 9 inches to 2½ feet in diameter. The supply of these hardwood trees around the mines became exhausted and it was necessary to bring them from longer distances at higher cost.

The result was that in the fall of 1916 and prior to the time when this country entered the war, the price of fluorspar reached $20 per ton. The prevailing price during 1917 and 1918 was around $30 per ton. The present price is approximately $25 per ton.

On account of the extreme pressure brought by the Government, the production of fluorspar was increased, in many cases even at the sacrifice of the mines themselves and the future production. In Illinois mining has now gone to depths of 500 to 600 feet. New and very expensive shafts have been sunk, heavy pumping equipment has been installed underground, mills have been redesigned and rebuilt to handle more complex ore, a more skilled class of miners is required, and the hazards of the industry have increased on every side. Fluorspar is no longer a cheap shallow mining proposition; it has become a complicated and expensive deep mining industry, and it will continue to become more costly as deeper levels are reached. Under these circumstances domestic producers can not compete with cheap English production.

Fluorspar can not now be produced at less than prevailing prices, and without a fair margin of profit there is no inducement to risk the hazards attendant on the development of new mines.

During 1920 imports of fluorspar have increased rapidly, from 938 tons in January to 4,187 tons in September and 3,085 tons in October. The figures for November and December have not yet been reported. This English fluorspar is offered at a price of approximately $16.25 per long ton c. i. f. New York, or the equivalent of about $16 per ton of 2,000 pounds after the duty has been paid.

It is absolutely impossible for domestic fluorspar producers to compete at such prices.

(9) *Effect of a failure to adequately protect the fluorspar industry.*—If the domestic industry is not adequately protected all of the mines in this country will be closed down except possibly a few most favorably located. There will be no exploration for new deposits, and the United States will be more and more dependent on foreign sources for its supply. In case these foreign supplies should cease, or in case the United States should be involved in another war, the situation of the steel industry would be critical and the entire effectiveness of this country would be seriously involved.

(10) *Effect of adequately protecting the fluorspar industry.*—A duty of $5 per ton on fluorspar will not increase the present price, but would result in maintaining it at some figure probably between $20 and $25 per ton. It would furnish some reasonable incentive for the exploration of new fluorspar deposits, and would tend to make the United States self-supporting in an essential raw material. In view of the trifling cost per ton of finished steel it would not affect substantially the manufacturing cost of the steel mills, and would in no sense change or affect the price of steel to the ultimate consumer. The steel companies are most vitally interested in securing a future supply of such an essential raw material. The national interests of the United States require the full protection of such a war necessity. The fluorspar industry would be properly encouraged and protected; the miners and laborers, who in the Illinois-Kentucky field are entirely white citizens of the United States, with permanent homes in the district, will not be thrown out of employment; and a source of revenue would be provided.

For the reasons above stated, the undersigned respectfully request Congress to establish a duty on fluorspar amounting to $5 per ton.

Roseclare Lead & Fluorspar Mfg. Co., E. C. Reeder; Fairview Fluorspar-Lead Co., by W. C. Bohn; Bell Mining Co., by M. Gullett; The Elchorn Fluorspar Co., by B. F. Anderson; Chicago Fluorspar Co., per Floyd E. Wright; Pure Fluor Spar Co., per Henry B. Pierce; Empire Fluor Spar Co., per Henry B. Pierce; Hillside Fluorspar Mines, by W. G. Ferguson; Lee Development Co., by H. B. Thomas.

BRIEF OF THE KENTUCKY FLUORSPAR CO. (INC.) AND THE WEST KENTUCKY ORE CO.

The undersigned producers of fluorspar in the State of Kentucky, feeling the necessity of placing an additional tariff on fluorspar, present for your consideration the following facts:

(1) Fluorspar is an essential element in the manufacture of open-hearth steel, and there is no substitute for it; more than 85 per cent of the fluorspar in the United States is used in the manufacture of steel. It is used as flux, and its purpose is to flow off the impurities in the iron and reduce the silica and sulphur content. By the use of fluor spar in the open-hearth processes the metal charge into the furnace may be composed of 30 per cent to 40 per cent scrap iron and low-grade pig, while the Bessemer process requires a charge of pig iron entirely. Greater furnace capacity, a cheaper metal charge, and a superior quality of steel are the important results obtained from the use of fluorspar as a flux. The usual open-hearth process requires from 5 to 10 pounds of fluor spar to the ton of steel.

(2) Fluorspar deposits are lenticular in form, and the fact that the lenses are irregular and uncertain makes it difficult to block out an ore body without incurring heavy expense, hence the mining of this produce is essentially hazardous. The average width of vein matter in the Kentucky field is not more than 3 or 4 feet, and mining operations are now being conducted at a depth of 380 feet. For a good many years only surface mining, or near surface mining, was done, which involved small development costs and little expenditure for equipment and resulted in a large production of material of uncertain and varying quality, the only refining process being the use of the ordinary log washer. At this time there is little left in this field of surface deposits, and we are forced to resort to deep mining for the production of this product, with the increased hazards on account of the nature of the deposits, the added costs of permanent development work, the necessity of a far greater amount of equipment, the general increase in mining costs, and the necessarily heavy depletion charges on account of the narrow width of vein matter. We also have to contend with the fact that practically every operation in this field is off the railroad, and the cost of transportation to the railroad over poor dirt roads is a serious item. The varying quality of the ore and the fact that the steel makers have grown more exacting as to the quality of the material has resulted in the necessity of erecting refining mills for the preparation of the product for market, thus adding materially to the cost per ton of the product.

(3) A general history of the industry over a period of 20 years would bring out the following material facts: Prior to 1904 there was considerable activity in the development of fluorspar properties in this field, and there were prospects of a substantial and permanent industry. About this time, however, importations from England, from dumps around former lead operations, began to come into this country, the materials being brought over as ballast and carrying no mining costs. This importation of fluorspar demoralized the market to such an extent that it was impossible to operate fluorspar properties in this field without serious loss. This condition prevailed almost continually until the recent World War. After this time it was impossible to get transportation for the foreign product, and the increased prices paid for the domestic product created renewed activity in mining operations in this field, as well as in other fluorspar producing sections. This activity, coupled with the urgent insistence of Government officials during the last two years of the war that domestic production be stimulated to the point of supplying the steel industry from domestic sources brought out practically every pound of available tonnage from surface deposits and resulted in the thorough exploitation of the various fluorspar producing sections. In this section all of the surface deposits were cleaned up, all old mine dumps and abandoned properties were worked, and many new properties were prospected, opened up, and abandoned, without the location of new ore deposits of any importance, it being demonstrated that there are no new sources of supply in this field. So far as we are able to ascertain, this is true also of other fields of production.

The fact is, therefore, that our production must come as the result of more extensive and expensive development work. This will involve the investment and expenditure of large capital in order to secure satisfactory results in this field, and unless the industry is given proper protection the required capital can not be obtained. It is generally conceded that this field holds possibilities of large tonnage production over a long period if properly developed.

(4) A thing of special importance, as shown by conditions which existed during the recent conflict, is the necessity of providing a dependable supply of fluorspar in this country—this product being essential to the manufacture of high-grade steel—in event of future wars, or the existence of any other condition which would probably cut off foreign sources of supply.

(5) The larger sources of domestic supply at this time are the Illinois and Kentucky fields, the Illinois field being by far the largest producing field in the United States. The principal operations in Illinois are those of the Rosiclare Fluorspar Co. and the Fairview Fluorspar & Lead Co. These two operations are right on the banks of the Ohio River and are in constant danger of flooding when the waters of this river are high. We are advised, further, that it is the experience of the larger operators who are mining at a depth of about 600 feet that the quality of the material is more inferior as they go deeper, requiring additional refining to prepare the product for the requirements of the steel maker.

(6) In the operations in the Kentucky field—and we understand that the same is true in the Illinois field—the labor is entirely American; this policy has been pursued throughout the history of the industry.

(7) Since the close of the war, according to our information, the imported product is again coming into this country at a rate that will seriously affect domestic activity unless some protection is provided that will enable the domestic operators to continue development work and improvements with assurance that their operations will not result in a loss.

(8) We feel that the general situation in the production of fluorspar in this country, and the facts set out herein, entitle this industry to protection in the form of a tariff, and it is our opinion that an additional tariff of $5 per ton will provide reasonable protection and will result in the establishment of the industry on a permanent basis. Such a tariff would not result in an increase in the price of fluorspar but will only result in the maintenance of a scale of prices which are as low as is consistent with the permanent establishment of our operations. Unless protection is provided, the result, in our opinion, will be that only two or three of the stronger concerns will be able to continue operations; and it appears to us as a reasonable assumption that they would necessarily restrict their production to present operations and that they would not be encouraged to further or larger development work.

(9) An additional tariff of $5 per ton on fluorspar would mean an increased cost of steel of only from 1¼ to 2½ cents per ton, and should not increase the cost of steel to the ultimate consumer. On the other hand, it would place our industry on a basis that such development work could be done and such necessary equipment installed as would develop a dependable source of supply in this country and would provide against the contingency of wars or other conditions endangering adequate supply of fluorspar for the requirements of the steel industry.

A. A. NORTHEN, *President.*
H. L. WILSON, *Secretary-Treasurer.*

FULLER'S EARTH.

[Paragraph 76.]

BRIEF OF L. A. SALOMON & BRO., NEW YORK, N. Y., AND AMERICAN MEAT PACKERS' SUPPLY CO., CHICAGO, ILL.

We are engaged in the purchase, importation, and sale of fuller's earth. To the best of our knowledge, all fuller's earth brought into this country comes from Great Britain and they are the largest importers, their importations representing more than 95 per cent of the total.

In the tariff fuller's earth is classified as unwrought (or lump) and wrought (or powdered) fuller's earth. Importations of the unwrought fuller's earth during 1920 amounted to approximately 200 tons. This fuller's earth is used for textile purposes.

The importations of wrought fuller's earth during 1920 amounted to approximately 15,000 tons, practically all of which is used in refining lard and lard compounds and animal and edible vegetable oils, such as cotton seed, coconut, etc. The wrought fuller's earth, therefore, is used almost exclusively in

the production of essential food products which are used in almost every home, particularly among the poorer classes. We have imported English fuller's earth for more than 30 years and their brands are recognized as the standard and are being used by most of the large packers and refiners, who have found it to be the best and most uniform in the market. A copy of a letter written by one of the largest users, Messrs. Swift & Co., Chicago, Ill., dated September 16, 1918, is attached. It is an established fact, known to all practical refineries of edible oils and fats, that one of the principal advantages in the use of English fuller's earth is the smaller grease retention, which is, of course an important item in point of economy, decreasing the refiner's cost of production correspondingly.

Aside from this, products treated with domestic fuller's earth are not as good as those refined with English earth. Only recently the majority of the large packers in the United States, after having used domestic fuller's earth for three or four years, resumed the use of English fuller's earth, as they found that the domestic fuller's earth left a taste in the lard.

The average selling price of imported fuller's earth is $25 per ton, 2,000 pounds, f. o. b. seaboard, including bags. This is a higher price than is quoted by domestic producers, except possibly at some points along the seaboard, where, due to the high freight rates from the interior, the cost of the domestic earth is greatly increased. On the other hand, at many inland points the domestic producers of fuller's earth have the advantage, due to the proximity of the mines to some of the important consuming centers, and the fact that special import freight rates from the Atlantic seaboard to inland points which had always existed and which were in effect when the present tariff law was enacted were withdrawn about two years ago.

In spite of the decline in the rate of sterling exchange of about 30 per cent, the selling price of English fuller's earth has actually increased 70 per cent, the average selling price f. o. b. seaboard in 1918 having been about $15 per ton, while it is now, as above stated, about $25 per ton. Due to the enormous increase in inland freight rates, the ratio of increase on shipments to interior points is still greater. For instance, at Chcago, which is one of the principal consuming centers, the increase amounts to approximately 80 per cent. The decline in the rate of sterling exchange has, therefore, not given the English producers any undue advantage, although it is now of what is generally conceded to be its lowest point.

The importance of English fuller's earth in the manufacture of food products was recognized by this Government during the war and no restrictions were placed on its importations.

The principal source of production of American fuller's earth is Florida. The fuller's earth is of a different character from the English fuller's earth and most of it is used for refining petroleum products, for which purposes the English fuller's earth is entirely unsuited. In fact considerable quantities of Florida fuller's earth are exported to Europe for petroleum refining purposes and always have had a considerable market right in England.

A higher tariff is, therefore, not needed to protect the American fuller's earth industry, but would merely tend to increase the cost of those essential food products in the refining of which fuller's earth is used. We accordingly urge that the present rates of duty on fuller's earth be retained.

SEPTEMBER 16, 1918.

GENTLEMEN: We have had a great deal of experience trying to find a domestic earth we can use, but have not located any that was as good as the English earth. The English earth gives better results in bleach and flavor. There is less fire risk and less loss from grease retention in the spent earth. There are some American earths that equal the English earth in one or two characteristics, but we have not found one. Earth is very high largely because of the high freight rates, and we hope there will be nothing done that will increase our delivered cost. If we are forced into using American earth because of the delivered cost of the English earth, unless better earth can be discovered than we know of now, it will be at the expense or loss of the edible product, for as stated, the principal trouble with American earth has been a much greater grease or oil retention in the spent earth.

MODELING CLAY.

[Paragraphs 76 and 385.]

JERSEY CITY, N. J., *December 20, 1920.*

We make a manufactured article sold under the name of Plasteline, which comes under the tariff act of 1913, as an nonenumerated article at a duty of 15 per cent.

We wish you would place Plasterine as an enumerated manufactured article under Schedule B, of the new tariff act, the same to read as follows:

> Plasteline (also known as Plastilina, Plasticine, Modeline, and other kindred names); manufactures or materials composed or consisting wholly or in chief value of earthy or mineral substances used for modeling purposes, 35 per cent ad valorem.

We wish to call your attention to the fact that we are unable to keep our factory running under a 15 per cent tariff on a manufactured article. In fact, it means that we must go out of business unless our product is protected to this extent.

We therefore kindly request you to enumerate Plasteline as suggested above.

CHAVANT MANUFACTURING CO.

BRIEF OF THE CHAVANT MANUFACTURING CO., JERSEY CITY, N. J.

For the Chavant Manufacturing Co., of Jersey City, N. J., of which I am secretary, I beg to submit the following brief for the consideration of your committee in connection with its investigation regarding the tariff.

Plasteline, also known as Plastilina, Plasticine, Modeline, and other kindred names, is under the present tariff act a nonenumerated article, and subject as such to a duty of 15 per cent ad valorem. We respectfully urge that Plasteline, also known as Plastilina, Plasticine, Modeline, and other kindred names, be placed in the new tariff act as an enumerated article, and subject to the 35 per cent ad valorem duty.

Our reasons for making this request are as follows:

(1) Plasteline was manufactured by our competitors in Europe before 1914 at a lower cost than American producers could meet, and it reached our shores at a considerably lower cost than we could produce same. The war, of course, stopped the importation of this material temporarily. The European production has started again, and still at a lower cost than we can produce same in this country. American manufacturers are already feeling the effect of this competition. The reason for the lower cost of production in Germany, France, Italy, and England is that the raw materials are cheaper, and, as your honorable committee knows, the labor cost is very much lower than in the United States. The standard of living of the American laborer is considerably higher in this country than abroad, and we must do all we can to prevent its being lowered.

(2) During the period of the war American producers invested large sums in expensive machinery for the manufacture of Plasteline, etc., and it is only fair to protect these investments as above suggested.

(3) For the past 15 years Plasteline has been before the Court of Custom Claims at the port of New York, because European manufacturers have been endeavoring to get the same into this country as common clay at the duty of $2 a ton. The value of common clay is $8 or $10 per ton, and the value of Plasteline, etc., is $250 per ton. Fortunately for American manufacturers their efforts have always been defeated. This is cited to show that our European competitors have been constantly trying to undermine this business in America.

In summing up I wish to bring to the attention of your committee the fact that unless this industry is given the protection requested we will be unable to compete with the European manufacturers, and will be obliged to go out of business. In these times of business uncertainty and unrest it is particularly necessary that American industry be given as great a protection as possible. We feel that our request for a 35 per cent ad valorem duty is very low and reasonable on a manufactured article which requires a high technical knowledge and the employment of costly machinery and expert labor.

In closing we would like to say that we are informed that the manufacture of Plasteline, etc., is being extensively engaged in in the countries above

enumerated, and the manufacturers of this product in this country anticipate that, unless the above protection is afforded us at once, our American market will be swamped with this material from Europe.

MICA.

[Paragraph 77.]

CHARLES P. STORRS, REPRESENTING THE STORRS MICA CO., OSWEGO, N. Y.

Mr. STORRS. Mr. Chairman, I represent the Storrs Mica Co., Owego, N. Y. We manufacture mica lamp chimneys for gas and gasoline lights. We also import mica, which we sell to other manufacturers who use it for various electrical appliances, such as spark plugs, condensers, and also phonograph diaphragms, and many other uses. Our request is simply in regard to the unmanufactured material, and we ask that the duty be not raised.

We feel that the present duty on raw material, which is 4 cents a pound on mica valued not above 15 cents a pound, and 25 per cent ad valorem on mica valued above 15 cents a pound, is ample to protect the American product, and any increase would only tend to increase the cost of articles of common use of which mica is an important part and would not benefit in any way the production of the domestic mica. The fact that the Geological Survey has disclosed, after their investigation of the mica situation in 1918, which is published in the Mineral Resources for 1918, shows that the total consumption of that year of mica in the United States was over 4,000,000 pounds. A little over a million and a half pounds were produced by American mines, leaving about two million and a half to be imported. The Geological Survey sent a representative to the principal mica fields. Most all the American mica is produced in North Carolina. They investigated the situation and reported that, even under the stimulus of high prices and the urgent need for the material, the American product did not show very much further development in the emergency, especially as the qualities of mica produced in this country do not meet all requirements. For certain purposes the India mica is absolutely required, and mica from Brazil which is very similar to the India mica. The American mica is somewhat harder, and in rolling it into a small cylinder it is not as flexible as the India mica.

The CHAIRMAN. What is the consumption of mica in pounds in the United States?

Mr. STORRS. The last figures we had were about 4,000,000 pounds for 1918.

The CHAIRMAN. The importations are quite large, are they not?

Mr. STORRS. About two million and a half pounds in that year. The importations in 1920, up to September 30, were valued at two and one-half million dollars. The raw mica, not manufactured mica, was about 1,100,000 pounds, but that does not include the splittings which were classed under a separate rate.

The CHAIRMAN. I have here the 10 months ending with October—1,375,927 pounds this last calendar year; for the same period the year before, 735,000 pounds; and in 1918, 604,000 pounds.

Mr. STORRS. We feel that 25 per cent ad valorem duty on raw material is ample to protect the American mica, especially as the quality is so different in many respects from the imported material. The manufacturers of mica board and the manufacturers of phonograph diaphragms will likely ask the committee for increase in the manufactured product; but we are not concerned with that, except that personally I think it is an equitable arrangement.

Mr. GARNER. If I understand you, the difference in the quality of mica makes it absolutely necessary to continue its importations.

Mr. STORRS. Yes, sir; undoubtedly.

Mr. GARNER. It makes no difference what the rate of duty might be, they would continue to bring it in on account of the superior quality that you speak of, which the American mica can not meet?

Mr. STORRS. I think the rate of duty could be raised so high it would turn the industry to some other substitute after a certain point. The revenue derived from the importation of mica is rather large now for a small industry.

I have a number of letters in connection with my brief, and telegrams from manufacturers with whom I have communicated in regard to the matter. Many of them say that they feel that the increase in duty on raw material would be inequitable.

The CHAIRMAN. Mr. Storrs, under the Payne tariff law "unmanufactured or rough trimmed only, 5 cents per pound and 20 per cent ad valorem," or an average ad valorem of 34.27 per cent. Four cents a pound, on the basis of 90 cents, is a fraction over 4 per cent, as against 34 per cent under the Payne law.

Mr. STORRS. Four cents a pound, Mr. Chairman, does not apply to mica over 15 cents a pound in value.

The CHAIRMAN. Valued at not above 15 cents, that is in the raw state. All above does.

Mr. STORRS. But there is very little mica, raw mica, imported that is valued under 15 cents. Most of it averages 97 cents, I believe.

The CHAIRMAN. But, valued above 15 cents, 25 per cent ad valorem under the Underwood law.

Mr. STORRS. Under the Payne law I think it had, besides a specific duty, an ad valorem of 20 per cent.

The CHAIRMAN. You have the specific duty of 5 per cent——

Mr. STORRS (interposing). An ad valorem of 20 per cent.

The CHAIRMAN. On the rough.

Mr. HAWLEY. Five cents.

Mr. STORRS. Five cents on the unmanufactured and 20 per cent ad valorem.

The CHAIRMAN. Five cents a pound and 20 per cent ad valorem?

Mr. STORRS. Yes, sir. The 4 cents per pound—that only applies to mica valued under 15 cents.

The CHAIRMAN. The 4 cents applies to all the rates above?

Mr. STORRS. No, sir; I beg your pardon.

Mr. GARNER. Under the Payne law the ad valorem is 34 per cent.

Mr. STORRS. Yes, sir; and a slight reduction under the Underwood law.

Mr. GARNER. No; the Underwood rate, if I understand, is 25 per cent ad valorem.

Mr. STORRS. The equivalent was 35 per cent under the Payne law.

Mr. GARNER. The equivalent?

Mr. STORRS. I mean, the rate that applied to the same class of mica was 35 per cent under the Payne law. The Underwood tariff reduced it to 25 per cent.

Mr. GARNER. What importations were there under the Payne law?

Mr. STORRS. The volume was not nearly as great as it is now.

Mr. GARNER. The percentage of importation was as great as it is now—25 per cent?

Mr. STORRS. Oh, no, sir. The volume of business was not as much. Mica was not as generally used.

Mr. GARNER. In the percentage of consumption of mica at that time compared with the consumption now, what was the percentage of importations compared with the American consumption?

Mr. STORRS. It averaged about 40 per cent. The American production averaged for 10 years back about 40 per cent of the total consumption. So the other 60 per cent was imported.

Mr. GARNER. That applied under the Payne law as well as under the Underwood law?

Mr. STORRS. Yes, sir.

Mr. GARNER. Then you got more revenue under the Payne law than you did under the Underwood law, did you not?

Mr. STORRS. No, sir.

Mr. GARNER. If you imported the same amount on the basis of 35 per cent that you did on the basis of 25 per cent you would get more revenue.

Mr. STORRS. I was speaking of quantities. The value of mica in those days was not nearly as great as it is now. The demand has forced the price up, so the revenue is actually much larger than it was at that time.

Mr. GARNER. The rate now is much larger than it was at the time the Payne law was passed?

Mr. STORRS. Not the rate.

I have filed a brief. But I would like to say one thing that occurs to me—that most of the mica that is imported comes from countries where the rate of exchange is low, and if we are going to encourage those countries to buy manufactured material from us, it seems reasonable to think that anything we can buy in the way of raw material from them that does not really compete with our own raw materials is so much nearer toward helping in this exchange situation.

The CHAIRMAN. My friend, the policy of the Republican Party in framing a tariff law is to let in free raw material that is not produced in this country.

Mr. STORRS. We would be very glad to have this on the free list if the Congress so desires.

BRIEF OF THE STORRS MICA CO., OWEGO, N. Y.

On behalf of the Storrs Mica Co., Owego, N. Y., manufacturers of mica lamp chimneys for gas and gasoline lights, and importers and distributors of mica, I beg to protest respectfully against any increase in the tariff on unmanufactured mica. We take this position with the concurrence and approval of a number of other firms and corporations engaged in the importation of mica and in the manufacture of various articles from mica, including a number of electrical manufacturers of whose product mica is an essential part. We are prompted to submit this argument against increased duties because we have been advised that a request for higher rates will be made at this time by the company which handles the bulk of the domestic production of this mineral.

I.

The paragraph in question in the act of 1913 reads as follows:

"77. Mica, unmanufactured, valued at not above 15 cents per pound, 4 cents per pound; valued above 15 cents per pound, 25 per centum ad valorem; cut mica, mica splittings, built-up mica, and all manufactures of mica, or of which mica is the component material of chief value, 30 per centum ad valorem; ground mica, 15 per centum ad valorem."

We strongly urge that no increase be made in the duty on unmanufactured mica, as higher duties on this raw material would only tend to increase the cost to consumers of numerous articles of neces ity and utility and would handicap American manufacturers of such articles in competition with foreign manufacturers who pay no duty on this raw material and would in no way develop any increased production of the domestic mica.

Our reasons for oppo ing the higher duty are briefly as follows:

A. The domestic product can not meet all requirements of American manufacturers.

B. The imported mica is better suited for many purposes than the domestic product.

C. The production of domestic mica does not need any further protection than that afforded by the present rate of duty on the raw material.

D. Prices at which imported mica is sold in the United States are considerably higher than prices prevailing for domestic mica.

A. DOMESTIC MICA CAN NOT MEET ALL REQUIREMENTS OF AMERICAN INDUSTRY.

The United States Geological Survey made an exceptionally careful study of mica, and its report on this mineral for the year 1918 is published in the Mineral Resources of the United States for 1918, part 2, pages 629 to 694; 1918 is the la t calendar year for which complete statistics have been published. For that year the total production of sheet mica in the United States is reported as 1,644,200 pounds, valued at $731,810, averaging in value 45 cents per pound (p. 632). Of this production, 1,175,500 pounds, or 71 per cent, consisted of punch mica, the smallest sizes of sheet, available only for punching small washers. For the same year the estimated imports of sheet mica, including splittings, amounted to 2,566,000 pounds (p. 639). For that year the apparent consumption of sheet mica, including splittings, in the United States amounted to 4,130,000 pounds. The percentage of consumption represented by domestic production was only 40 per cent. The same percentage averaged for the years 1910 to 1918 only 41 per cent. The Geological Survey's report on page 632 makes the following statement:

"Briefly, then, it may be said that the mica-producing States of this country did not do much more than hold their general average. Under the stimulus of needed production and of high prices they failed to show that their output could be materially increased."

And on page 633:

"It is easy to see that the domestic mica was not sufficient to supply the demand for condenser mica, which amounted to many hundred thousand pounds in 1918 and was expected to be nearly 1,000,000 pounds for 1919, if the military program had continued in full force."

And on page 637: With reference to requirements for war purposes:

"From the results of investigation undertaken by the Government it soon became apparent that the available stocks of imported sheet mica would serve for the uses demanded by the war program only for a very short time and that the stocks of domestic mica, although much larger in quantity, would also last for a very short time, as so much of the domestic mica was not of the right quality. Hence it was evident that the United States possessed no available reserve of sheet mica of good quality, that the domestic production could not quickly afford the needed relief, and that the country was absolutely dependent on imported sheet mica of good quality to meet any materially increased consumption."

On page 645 of the Mineral Resources for 1918 mention is made of the efforts of the War Industries Board during that year to encourage the production of domestic mica. Suggestions were called for from the domestic producers and an association of southern mica miners and manufacturers was

formed for the purpose of formulating suggestions for the development of the industry. The War Industries Board, after conferring with this association, arrived at the following conclusions:

"1. Any artificial stimulation either in the form of price fixing or financing of mica mines by the Government was not warranted, inasmuch as such action would result in the increased production of the inferior grades of mica, of which there was a plentiful supply, and would not result in a material increase in the quantity of the high-grade material such as was required for Government use.

"2. That under existing conditions as to both price and manufacture there was little chance of utilizing a much larger proportion of domestic mica."

B. THE IMPORTED MICA IS BETTER SUITED FOR MANY NECESSARY PURPOSES THAN THE DOMESTIC PRODUCT.

Much of the mica used in various branches of industry is required to possess special characteristics which do not pertain to any mica mined in the United States. Especially is this true in the case of electrical machinery, which furnishes the largest field for the use of mica, there being no insulating material that can be substituted for mica in many electrical appliances. For instance, in commutators for motors and dynamos it is necessary to use either the amber mica of Canada or the India mica because of their being softer than the American mica, and therefore wearing down uniformly with the alternate layers of copper.

The larger proportion of the mica consumed by the electrical industry is used in making built-up or reconstructed mica in the form of plates, boards, rings, segments, and special forms. This is an insulating material of vital importance to the industry, made of mica splittings molded together with an adhesive material into various forms. The greater softness, superior cleavage, and elasticity of the Canadian amber and the India mica make it requisite to use these grades to supply a product of the necessary quality.

In making mica lamp chimneys it is necessary to import the clear mica from India, Brazil, or Argentina, as little, if any, domestic mica can be obtained that possesses all the three requisite qualities as follows: Absolute clearness, perfect cleavage, and pliability such that it can be rolled into cylindrical form without cracking.

For winding cores of spark plugs it is necessary to roll the mica into a small cylinder. Much of the domestic product is rather too hard for this purpose, the more flexible imported micas being preferred. Many condenser manufacturers also prefer the imported material on account of its superior flexibility and free-splitting qualities.

For many purposes, however, the domestic mica is equally as good as the imported. In certain classes of electrical work, and especially for use in stoves, washers for spark plugs, etc., the domestic product is useful.

C. THE PRODUCTION OF DOMESTIC MICA DOES NOT NEED ANY FURTHER PROTECTION THAN THAT AFFORDED BY THE PRESENT RATE OF DUTY ON THE RAW MATERIAL.

As the punch mica, which constitutes 71 per cent of the domestic production of sheet, is valued at 7 to 12 cents a pound, the specific duty of 4 cents per pound on mica, valued at not above 15 cents per pound, leaves the field of competition absolutely clear for nearly three-fourths of the domestic product.

D. Prices at which imported mica is sold in the United States average considerably higher than prices prevailing for domestic mica.

On pages 648 and 649 of "Mineral resources for 1918" will be found tables showing average prices per pound of domestic sheet and Indian sheet mica prevailing at the close of 1918. This will serve for purposes of comparison. The general trend of prices of both domestic and imported mica tended upward during 1919 and until toward the close of 1920. The prices on India mica shown in the report, which add 60 per cent to London prices, are probably a little lower than the average wholesale price in the United States. Comparing these tables by corresponding sizes, we have the following (to be conservative we are taking the prices of "ordinary stained" India mica, which is a lower grade than the bulk of mica imported from this source):

Domestic.		Indian.	
Size.	Price (per pound).	Size.	Price (per pound).
Punch	$0.07	No. 6	$0.38
1¼ by 2 inches	.55	No. 5½	.58
2 by 2 inches	.95	No. 5	.96
2 by 3 inches	1.35	No. 4	2.00
3 by 3 inches	1.85	No. 3	2.77
3 by 4 inches	2.15	No. 2	3.81
3 by 5 inches	2.65	No. 1	4.77
4 by 6 inches	3.50		

We respectfully urge that in view of the above facts increased duties on unmanufactured mica would in no way aid in the development of the domestic product and would simply tend to increase unnecessarily the cost to consumers of many articles of prime necessity.

Another point to be considered in this connection is that the bulk of the mica imported (except the Canadian amber, which is a distinct quality) comes from India, either direct or through England, from Brazil, and from Argentina. In all these countries exchange rates are at present so low as to interfere with the purchase of American manufactures. The welfare of American industry in general would doubtless be furthered by the encouragement of such imports of raw material from these countries as would tend to bring the rate of exchange toward normal, especially when the raw materials are of such a nature that they do not directly compete with or interfere in any way with the fullest possible development of domestic sources of supply.

II.

As to importance of the industry, mica is a material of the utmost value, especially in the electrical industry, owing to its efficiency as an insulating material and its heat-resisting qualities. In one form or another it is used in a great variety of electrical appliances, such as commutators, electrical heating apparatus, such as flatirons, ranges, toasters, etc.; in condensers for radio apparatus, and for magnetos used for motor ignition systems. Mica is also used extensively in the manufacture of spark plugs, which are especially important for use on farm tractors, heavy commercial trucks, and aircraft engines. The importance of stove mica is well known. Mica is necessary in many forms of electrical fuses, switches, etc. It is also widely used for chimneys for gas and gasoline lamps of various types, being used in many cases where glass could not be used on account of the heat developed. The sound box of almost every phonograph is fitted with a mica sound diaphragm.

Mica is so widely used in so many different lines of manufacture that it is difficult to estimate the number of employees engaged in the production of articles of which mica is a necessary part, but 10,000 is probably a conservative estimate when one considers the manufacturers of mica board, mica spark plugs, electric heating apparatus, magnetos, and mica chimneys.

Probably not more than 500 persons are regularly engaged in the mining of mica within the United States. There are few mining operations in this country of any size, most of the material being produced by individual effort of scattered miners, who mine in a small way and whose product is bought up by two or three companies who handle and distribute practically all of the domestic product. It is an interesting fact that the one of these companies that handles the largest amount of domestic mica also imports large quantities of mica from abroad.

III.

Imports of mica are brought in chiefly from India, either direct or through England, from Canada, from Brazil, and from Argentina. Small quantities of Africa mica are coming in through London. The volume of imports in recent years and the amount of the duties collected thereon are shown in the following statement of imports of mica entered for consumption, obtained from the Division of Statistics, Bureau of Foreign and Domestic Commerce, Department of Commerce:

Imports of mica entered for consumption.

Mica:

Unmanufactured—	Rate of duty.
(*a*) valued at not above 15 cents—cents per pound—	4
(*b*) valued above 15 cents—per cent—	25
(*c*) Ground—do—	15
(*d*) Cut, splittings, etc—do—	30

YEAR ENDING JUNE 30, 1918.

Classification.	Quantities.	Values.	Duties.
	Pounds.		
(a)	31,629	$8,974.00	$3,265.16
(b)	582,503	507,794.00	126,948.50
(c)	11,037	1,384.00	207.60
(d)	(1)	974,998.00	292,499.40
Total for period		1,493,150.00	422,920.66

SIX MONTHS ENDING DEC. 31, 1918.

Classification.	Quantities.	Values.	Duties.
	Pounds.		
(a)	32,403	$2,678.00	$1,296.12
(b)	317,702	329,962.00	82,490.50
(c)	550	263.00	39.45
(d)	(1)	313,976.00	94,192.80
Total for period		646,879.00	178,018.87

YEAR ENDING DEC. 31, 1919.

(a)	78,076	$8,143.00	$3,128.04
(b)	645,637	718,389.00	179,597.25
(c)	62	9.00	1.35
(d)	(1)	762,223.00	228,668.40
Total for period		1,488,769.00	411,390.04

NINE MONTHS ENDING SEPT. 30, 1920.

(a)	104,330	$12,314.00	$4,173.20
(b)	1,053,641	982,477.00	245,619.25
(c)	6,595	10,223.00	1,533.45
(d)	(1)	1,413,251.00	423,975.30
Total for period		2,418,265.00	675,301.20

[1] Not stated.

IV.

We strongly recommend the retention of paragraph 77 in its present form. The classification is well understood, both by the customs officials and by the importers and by the trade in general. An increased rate in the duty on built-up mica board and manufactures of mica would not be objectionable, and might be of real value to American manufacturers, but any increase in the rate on unmanufactured mica or mica splittings, which are both actually raw material and not suitable for use in any way without being subjected to manufacturing process, would work to the disadvantage of a considerable number of manufacturers and the consumers of their products.

The writer asked a number of manufacturers for an expression of their attitude toward the suggested increase in the duty on unmanufactured mica. A number of letters and telegrams bearing on this point are printed below.

CHAS. P. STORRS.

[Telegram.]

NEW YORK, *January 3, 1921.*

We strongly oppose the increased duty on unmanufactured mica. Foreign manufacturers have far too much advantage now. Letter follows.

THE PHONOGRAPH APPLIANCE CO.

NEW YORK, *January 3, 1921.*

DEAR SIR: We have just learned that you intend appearing before the Ways and Means Committee on January 10 and 11, when a hearing is to be held on the subject of tariff on mica. We feel sure that with your wide experience in all branches of the business you will take a strong position in opposition to any increase of the present rate on the raw material.

This country has depended upon imported raw mica for at least 90 per cent of the high-grade mica used in our electrical industries and for practically all of the mica used in the manufacture of scientific, therapeutic, and radio instruments.

Large enterprises are being fostered in foreign countries, particularly England, for the fabrication of mica, and for these purposes they now have the advantage of 25 per cent duty on the raw material, as well as high ocean freights and insurance. This advantage has enabled them already to offer within the last few months enormous quantities of fabricated mica and manufactured mica specialties in this country at prices with which the American manufacturer is not able to compete. Any further advantage in this respect given to the foreign manufacturer will result, in our opinion, disastrously to the business here, and you must realize that the mica miner here is wholly dependent upon the prosperity of the manufacturer here for a market for the little high-grade mica which he produces.

We know it to be a fact that the largest buyer of domestic mica in the United States, located near the center of domestic mica production, has now in his warehouses enormous quantities of mica imported from India and other foreign countries, which would indicate that the entire production in the greatest producing area in the United States is not sufficient to support even one large manufacturer. The same thing is true of the large manufacturers in other mining sections.

In New Hampshire large electrical companies maintain mines, and up to recently have maintained purchasing agencies in other producing sections, without being able to supply more than a very small amount of their requirements, being dependent upon importations for upward of 95 per cent of the mica which they use. These same large enterprises have factories in Canada and connections in England and, in at least two instances, purchasing agencies in India.

To increase the cost of imported raw mica for their use would undoubtedly force them to manufacture a large part of their mica products abroad, and would throw out of employment more men and women in this country than the entire population of the United States dependent upon mica mining.

During the last three years prices on raw mica of all grades have increased to an enormous extent, as you know, but this has had little, if any, appreciable effect upon the production of mica by the miners in the United States.

We ourselves operated a number of mines which we felt obliged to abandon some time ago on account of the uncertainty of production and our inability to obtain in this country suitable labor to mine and handle the product at the mines. This condition prevails throughout the mica-producing sections of the United States.

With the exception of a very few mines owned or controlled by the manufacturers themselves, there is no systematic mining of mica going on in the United States anywhere. North Carolina, by far the largest producer of mica, depends for its supply, aside from the two or three producers mentioned above, upon the occasional work of small farmers who devote the little time not employed in producing their crops to opening up small pockets of mica in the neighborhoods where they live and preparing the product in a haphazard way to be bought up by itinerant buyers who represent local manufacturers as a general rule.

With a protective tariff in force for many years, and with buyers constantly coming and going to these neighborhoods, with the unlimited demand and with the highest prices paid anywhere in the world, the American mica-mining industry has shown little, if any, improvement.

The nature of the deposits in this country precludes the possibility of developing the mining industry along any other line, and to put a duty upon raw mica which would ruin the American manufacturer would be to destroy the open market for the American small producer and leave him at the mercy of the local manufacturer.

In 1909 Prof. Sterrett made an exhaustive survey of the mica deposits of this country, and his report, which will be found in the bulletins of the Geological Bureau, is replete with data showing the utter futility of any attempt to improve the mining methods or to develop mining industry under present conditions.

In addition to our mining enterprise in North Carolina and Georgia we maintained for a considerable time a purchasing agency in North Carolina, and became fully familiar with the mining situation as well as the manufacturing situation there, and we feel that our knowledge of the business from all angles should entitle our opinion to considerable weight; and we now say, without fear of contradiction, that at no time has the American miner been injured in any way by the importation of mica. On the contrary, he has been benefited greatly by increased importation, and his prosperity absolutely depends upon the prosperity of the manufacturer, who can not exist unless he is able to obtain mica in the markets of the world in sufficient quantities to make his business profitable, and this he can not do if he is to be restricted by increased duties on the raw material.

We are firmly convinced that the miner would be greatly benefited if the raw block mica were put upon the free list and a much higher duty than at present prevails was levied upon manufactured products.

We know that you can speak with authority for the importers and manufacturers of this country, and we wish to assure you of our hearty support in any measures for the benefit of the miner as well as for all the business generally.

THE PHONOGRAPH APPLIANCE CO.,
By J. L. FRAZEE.

CHICAGO, ILL.

GENTLEMEN: We consider that the present rates of duty on mica are plenty high enough.

Manufacturers who use mica as insulation should not be made to pay more, and thus raise the prices on their products to the consumer, for prices are high enough as they at present are.

The stove trade, who are large users of mica, will also have to increase the prices of their products, as mica is a large item at present in their costs.

The present rate of 25 per cent duty on unmanufactured mica from foreign countries is a very high duty for raw material, and we believe that a reduction to 20 per cent advalorem would be better for the trade and for business generally. The rate of 30 per cent for the cut mica from foreign countries we would advocate to let stand.

ROBT. K. PRESTON CO.

[Telegram.]

SPRINGFIELD, MASS., *January 3, 1921.*

We are ready to oppose any increase in tariff on foreign mica as domestic mica unsatisfactory our condenser work. Will appear before committee if necessary.

AMERICAN BOSCH MAGNETO CORP.

[Telegram.]

NEW YORK, *January 3, 1921.*

Your stand against increase of duty on unmanufactured imported mica receives our hearty approval.

AMERICAN MICA WORKS.

[Telegram.]

NEW YORK, *January 3, 1921.*

We strongly oppose any increase in present duty of 25 per cent ad valorem on raw mica and join with you in protest. Domestic mica quite unsuitable in all our manufactured mica. Have not used any domestic material in over twelve

months, although the imported mica has cost us approximately double the price. Should the tariff be increased it will seriously affect all our customers' production together with our own.

FORD MICA CO.

[Telegram.]

CHICAGO, ILL., *January 3, 1921.*

The mica from abroad is superior and American manufacturers should be in a position to use it advantageously. Present duty of twenty-five per cent is excessive.

CHICAGO FLEXIBLE SHAFT CO.

[Telegram.]

AUBURN, N. Y., *January 4, 1921.*

Increase of duty on unmanufactured mica will work hardship on manufacturers of mica spark plugs. Impossible to use domestic mica on account of quality. Hope you will do all you can to prevent increase.

NEW YORK MICA & MANUFACTURING CO.

[Telegram.]

BETHLEHEM, PA., *January 4, 1921.*

We believe an increase in tariff on unmanufactured mica uncalled for and that it would be a serious handicap to manufacturers in our line and many other lines.

BETHLEHEM SPARK PLUG CO.

BOSTON, MASS., *January 3, 1921.*

GENTLEMEN: We thought we would write you in regard to the proposed increase in the tariff, especially in connection with unmanufactured mica. It seems to us that the present duty is amply sufficient to protect the American miners. The small grades in particular can not be imported even with this duty and compete with the home product.

We wish that you would take this matter up when in Washington and oppose it in every way, as it seems to us that a further advance in the duty would be a hardship.

JOSEPH HUSE & SON (LTD.).

[Copy of report furnished by Mr. C. E. Davis, general manager, Eisemann Magneto Corporation, Brooklyn, N. Y., from Mr. C. E. Garneau, purchasing agent of this company.]

In reference to the letter attached, I would advise that you strongly support this mica concern in cooperating with them to oppose any further tariff increase on unmanufactured mica. Duty is very high at the present time, and since the material is needed for magneto work and for other electrical purposes and can not be produced in this country, as was shown during the war and at the present time, any increase in tariff on raw mica from European markets would mean a higher price in our market. Careful survey of the South, where most mica is produced, as well as New Hampshire, shows that although there is a considerable output of mica, about one-sixteenth of this can be used for electrical purposes, although local producers that supply the electrical trade suggest that we try to adopt mica not suited instead of purchasing European mica. Our experiments in domestic mica have resulted in Mr. Andrew not recommending the purchase of any for film work, and the same conclusion was reached by other magneto concerns.

I have made a personal study of the mica situation and am thoroughly acquainted with all its facts and uses, and from my survey throughout the South and New Hampshire and through cooperating efforts of the engineering department I have reached the conclusion that if we use mica condensers we must depend entirely on India and Brazilian mica, since there is not enough domestic mica of the quality we need produced in this country, and, furthermore, the quality produced is in no way useful for our product.

HERBERT W. SMITH, REPRESENTING THE AMERICAN MINING CONGRESS, WASHINGTON, D. C.

Mr. SMITH. Mr. Chairman and gentlemen of the committee, I serve as chief of the division of mineral tariff of the American Mining Congress, and I am appearing in behalf of the miners of mica in the United States.

Mica is produced in nine States in the United States—the States of North Carolina, New Hampshire, Georgia, Virginia, South Dakota, Alabama, Colorado, Texas, and New Mexico.

In somewhat by way of reply to what Mr. Storrs has just told you with regard to the lack of the supply of the grade of material that this country wanted during the period of the war, the following bulletin was issued by the Bureau of Mines in January, 1920, just a year ago now. It states:

> The attention of mica producers in the United States is directed to the fact that domestic mica is unpopular with many consumers, and one of the outstanding reasons given is likewise lack of careful preparation. Most users of sheet mica in the United States prefer India mica, but it has been demonstrated by some of the more important users of mica in the country that the inherent qualities of domestic mica for electrical purposes are equal to those of India mica, the preference for India mica being attributable largely to the poor trimming and grading of the domestic product. Apparently, therefore, one of the most important problems mica producers, both in Canada and the United States, are now facing is the development of more uniform and rigid methods of trimming and grading the mica as it comes from the mines.

In view of that statement I made a trip to New Mexico and to southern Colorado. The resources of these two States I found have not been investigated by the Geological Survey in connection with the investigations that Mr. Storrs speaks of, and I have had samples from those districts which were most interesting both in the formation and in the grade of the material.

Mica's occurrence in nature is due to a peculiar set of geological conditions. Mica can not be of commercial value where there has been a large stressing—a straining of the rocks during their more formative period. Mica forms in huge blocks or books. From these blocks or books are broken sheets of varying sizes, ranging from small sheets, the size of one's finger, to sheets the size of this [indicating sheet of mica]. Mica is mined in India in the Himalayan Mountains. The geological conditions in the southern Rockies are very similar to those of the Himalayas, which gave their claims for high-grade mica production a very good basis. I went out there and I found a growing industry, but a primitive industry. There has been invested in that part of the United States not over $500,000 in the various mines. They have sunk shafts to the depth of about 300 feet and they have opened up, as they got below the zone of weathering, mica of increasingly better grades.

Before I pass from the subject of production I want to say that with regard to the stimulus exerted by the war, that is scarcely a fair criterion on which to base a judgment of our possible domestic resources in any mineral which comes before you seeking protection by tariff. You can not expect to build up over the short space of two years or less, under all the hazards and fluctuations of prices in an unrestricted market, any industry which has never had a continuous life before, an industry which can compete with the for-

eign industry, which has had a period of life extending over our whole industrial era, and the feverish activity during the war in casting about here and there for deposits of any nature is not a criterion by which a fair judgment can be arrived at as to the possibility of our domestic supply. I might venture to say that if these minerals, including mica, which were so feverishly sought during the war, had had an adequate protection for a period of years prior to that, a great deal of that war-time stimulus would have been unnecessary, because the industries would all have been in existence on a stable basis.

A sheet of material of this size [indicating] weighs about 5 ounces. That is of high value because of its extreme size, because you can get from that a large number of sheets. This splits down to a microscopical thickness of one one-thousandth of an inch.

The cost of the raw material produced by the miner in finished mica product is a very small percentage of the total cost of that product to the consumer. This sheet [indicating] of mica weighing 5 ounces under the 1918 prices, merely because of its size, would have been worth possibly $2. The same weight of mica in normal size for domestic consumption, the size of that [indicating], 5 ounces, the size of that would be worth about 50 cents. Under the existing tariff the duty on that would be approximately 12½ cents on 50 cents worth of that material. This is split to a thickness varying in size to the product into which it goes. For wireless telegraphy transmitters and receivers—that is, I mean the insulators for transmitters and receivers—it is split to a thickness of one one-thousandth to one three-thousandths of an inch, with a permissible variable to five ten-thousandths of an inch. The price of an insulator for wireless telegraphy receiver bears no considerable relation to the cost of the raw material that enters into it. This sheet would split into more than 100 sound transmitters for a phonograph machine. It would split into many hundreds of small insulators for electrical equipment.

The mica as it is mined must be trimmed for the trade. To trim for the trade it is much better to use the hand process. This sheet [indicating] has been machine trimmed. Were this sheet [indicating] machine trimmed it would be similar to that sheet. So that when it was shipped to the manufacturer he would use all the advantage of these little odd corners. This is done by the native labor at the mines—by women and children and by men. When I say children, I mean youngsters 15 or 16 years of age.

Mr. HAWLEY. Is that a piece of domestic mica?

Mr. SMITH. Yes, sir.

Mr. HAWLEY. Where was it taken from?

Mr. SMITH. From New Mexico.

Mr. TIMBERLAKE. Is it your recommendation that a tariff is necessary to protect the industries of this country?

Mr. SMITH. I should suggest a tariff of 25 cents per pound and 50 per cent ad valorem on manufactured or rough trimmed mica and mica splittings; 50 cents per pound and 50 per cent ad valorem on cut, stamped, or trimmed, or manufactured mica; on photographic diaphragms 10 cents each, plus 50 per cent ad valorem; on ground, flake, and dust mica, 2 cents per pound; and on mica refuse, 1 cent per pound.

The CHAIRMAN. Please do that.

Mr. HADLEY. Would you eliminate the specific duty?

Mr. SMITH. A specific duty on mica is a most difficult thing. Ordinarily we agree entirely with the committee as to the desirability of a specific rather than an ad valorem duty.

BRIEF OF THE DIAPHRAGM MICA MANUFACTURERS.

GENTLEMEN: The undersigned, on behalf of the mica manufacturers of the United States, respectfully ask that the duties on imported mica diaphragms be raised from 30 per cent ad valorem—as they are at present—to 10 cents on each diaphragm and in addition thereto 50 per cent ad valorem.

I. To fully present to the committee their case, the undersigned beg to submit the following facts regarding the manufacture of mica diaphragms.

Diaphragms are used as sound reproducers in phonographs. Diaphragms are made of the best mica obtainable. Diaphram mica is very scarce, mines yielding only from 2 to 10 per cent of mica suitable for diaphragm work out of their total sheet mica output.

Domestic mines produce a very small quantity of diaphragm mica, entirely inadequate to the needs of the home industry, which relies mainly upon imported mica—chiefly India mica—for that material.

The process of manufacturing diaphragms is very elaborate and therefore very expensive, involving great mechanical skill and requiring at least five different operations. Labor, therefore, plays a great part in the cost of diaphragms, and with the price of mica at normal level we may safely assume that from 30 to 50 per cent of the cost of diaphragms is represented by labor.

Up to a few years ago the phonograph business was comparatively small; but during the past three years it has increased tremendously in this country (about 300 per cent), so that the business of manufacturing diaphragms in this country recently has also become of prime importance.

II. If a duty of 10 cents on each diaphragm in addition to the duty of 50 per cent ad valorem is not placed on imported diaphragms, American diaphragm manufacturers can not compete with foreign manufacturers.

Even when the phonograph business was in its infancy, and therefore the demand for diaphragms was very limited, local manufacturers were unable to compete with their foreign competitors. In fact, before the war most of the diaphragms were supplied by Germany. It was only when the war shut the Germans out of this market and the British Government commandeered the best clear mica for war purposes that domestic manufacturers were enabled to make mica diaphragms for home use. The reason for that is evident. Labor playing such a great part in the cost of manufacturing diaphragms, American manufacturers could never challenge the prices of their foreign competitors—especially the Germans, as labor abroad was almost 100 per cent cheaper.

Another important reason was that England with the India mines and Germany with the African mines had, so to say, first choice on the very limited supply of suitable material, while the domestic manufacturers had to rely either on the entirely inadequate domestic supply (which is somewhat less suitable for diaphragm work) or on the material refused by their foreign competitors. This condition will undoubtedly come into existence again as soon as manufacturing becomes normal in Europe, and will even be aggravated by the present money exchange conditions, which makes cost of labor in Europe still cheaper as compared with the cost of labor in the United States.

The history of prices at which diaphragms have been imported in this country fully substantiates the above considerations.

Before the war the Germans practically had monopolized the diaphragm business in this country, and such standard sized diaphragms as 1⅛, 1¾, 2⅛, and 2½ were selling at prices ranging from 5 to 10 cents, which would have barely covered only the cost of labor, if those diaphragms had been manufactured in this country.

During the war, of course, no diaphragms could be imported into this country from Germany nor from England either, because, as we stated before, the best mica was commandeered for war purposes by the British Government.

Though the war has come to an end, Germany, who by far has always been the big exponent in diaphragm manufacturing, has yet been unable to resume the exportation of diaphragms into this country. England has already begun

to manufacture, and though the undersigned do not possess the export figures in the hands of their competitors, still whatever data is available confirms the above consideration.

The American Mica Works, of New York City, obtained from their London correspondents, McLeod, Russell & Co., London, by letter dated March 4, 1920, the following London quotations for first-class diaphragms of standard sizes: 2⅞ (Brunswick size), 86/6 per 100; 2¾ (Pathe size), 73/6 per 100; 2⅝ (Columbia size), 65/0 per 100.

Cost of those diaphragms imported into this country would be about as follows: 2⅞—c. i. f. London, 16½ cents each; duty and other expenses paid at New York, 21 cents. 2¾—c. i. f. London, 14 cents each; duty and other expenses paid at New York, 18 cents. 2⅝—c. i. f. London, 12 cents each; duty and other expenses paid at New York, 15 cents.

The cost of the same size diaphragms to American manufacturers is about as follows: 2⅞, 30 cents each; 2¾, 26 cents each; 2⅝, 20 cents each.

The Insulation Sales Co., of 217 Center Street, New York City, last December obtained a shipment of diaphragms 2⅞-inch size (which is also a standard size), which cost them about 18 cents each c. i. f. London, and duty ad valorem was paid accordingly

W. A. Ross Bros., New York City, who, we are informed, are the American representatives of Baxter Bros., London, diaphragm manufacturers, as recently as a few weeks ago received a shipment of diaphragms also 2⅞, which they are offering for sale at 31 cents each, which will make the cost of those diaphragms in England, at the most, in the neighborhood of 18 or 20 cents.

The above figures corroborate quotation obtained by the American Mica Works.

One of the peculiarities of diaphragm manufacturing is that the cost of labor on each diaphragm is uniform irrespective of the size, so that the cost of manufacturing a 1⅝ (the smallest standard size) is equal to that of a 2⅞ (the largest standard size).

For that reason in small diaphragms material represents a small part in their cost while labor represents the bigger part; vice versa in the largest sizes.

That being so, unless a minimum duty is placed on each imported diaphragm, the American manufacturers would never be able to compete with foreign manufacturers in making the small sizes. We think that a minimum of a 10-cent duty for each diaphragm would about cover the difference in cost, labor, and overhead, while an additional general duty of 50 per cent ad valorem would about equalize other disparities in favor of foreign manufacturers and make competition possible.

The undersigned are not advocating ultra protectionism. They are fully aware that a high tariff wall, barring commercial intercourse between this country and Europe, will be prejudicial to our economical conditions and American business in general. For that very reason they are strongly opposed to an increase of duty on imported unmanufactured mica, because the existing 25 per cent tariff has worked out satisfactorily and has given reasonable protection to domestic products, as it is conclusively shown by the fact that India mica has sold uniformly at higher prices than domestic mica.

Domestic diaphragm manufacturers simply demand equal tariff protection, a protection that will counterbalance labor cost and other disparities in favor of foreign diaphragm manufacturers and will enable them to keep their ground and meet foreign competition on fair and equal basis. This would inure equally to the benefit of the American miners.

Section 77 of the tariff at the present time affords such protection to domestic mica dealers and it is only just that that section should be made such as to afford same protection to domestic diaphragm manufacturers.

III. The duty on imported diaphragms should be raised in order to protect American mica miners.

With the establishment of a large diaphragm business in this country, there has also been a great demand for the best quality of domestic mica.

Domestic miners—who used to sell their finest material to the trade mixed in and as a part of their clear mica at comparatively small prices—have been able to obtain very high prices for their diaphragm material. If the local diaphragm manufacturers would be thrown out of the market by their foreign competitors, there would be no longer any demand for diaphragm mica, and the American miners would be thus deprived of the advantage that a just and legitimate tariff protection would offer them.

Mica diaphragms should be specifically mentioned in section 77 to insure fair and undiscriminating application of the tariff.

We respectfully call to the committee's attention that section 77 of the tariff as it is at the present framed, permits a very unfair discrimination in favor of imported diaphragms.

Foreign manufacturers have succeeded in getting diaphragms into this country at a 25 per cent ad valorem tariff, upon the specious ground that imported diaphragms are only phonograph parts. Thus mica diaphragms, which are manufactures par excellence, are made to pass through the customs at a lower duty than cut or punched mica and even splittings, the duty on which is 30 per cent.

It is apparent that if the diaphragm is assembled in a talking machine, there might be some logic or reason in considering it a part of the phonograph, but when the diaphragms are imported in this country separately in bulk, they are intrinsically manufactures of mica and should be considered as such irrespective of the use that will ultimately be made of them.

In view of the above the undersigned respectfully ask that Schedule B, paragraph 77, of act of 1913, be made to read as follows:

"Mica, unmanufactured, valued at not above 15 cents per pound, 4 cents per pound; valued above 15 cents per pound, 25 per centum ad valorem; cut and punched mica and mica splittings, 30 per cent ad valorem; built-up mica and all manufacturers of mica, 50 per cent ad valorem; mica diaphragms and the like used in sound boxes, reproducers, talking machines, etc., 10 cents per each diaphragm and an additional 50 per cent ad valorem; ground mica, 15 per cent ad valorem."

THE PHONOGRAPH APPLIANCE CO.,
By J. L. FRAZEE.
FORD MICA CO. (INC.),
By JOSEPH LONG.
AMERICAN MICA WORKS,
By M. C. FERACHI.

BRIEF OF THE MANUFACTURERS OF BUILT-UP MICA.

The subscribers to this brief are manufacturers and sellers in the United States of built-up mica, mica board or mica plate, an insulating material having various trade names and made in innumerble sizes and shapes as required for electrical purposes.

The provision of the tariff act of 1913 covering our products is found in Schedule B, paragraph 77, reading:

"Mica, unmanufactured, valued at not above 15 cents per pound, 4 cents per pound; valued at above 15 cents per pound, 25 per centum ad valorem; cut mica, mica splittings, built-up mica, and all manufactures of mica, or of which mica is the component material of chief value, 30 per centum ad valorem; ground mica, 15 per centum ad valorem."

The particular items in this paragraph in which we are interested are "mica splittings, built-up mica, and all manufactures of mica," the first-mentioned article being our raw material and the two remaining provisions covering the merchandise manufactured by us. It would be noted at once that under the existing provision of law the same rate of duty is assessed upon our raw material as upon our finished product and we respectfully submit, upon the hereinafter stated facts and arguments, that the domestic industry employed in the manufacture of mica board or built-up mica and articles made therefrom requires for its protection from foreign competition a rate upon mica board, built-up mica, and manufactures of mica double that provided for mica splittings.

"Splittings are the very thin sheets or films of mica which are split from the smaller sheet mica. The excellent cleavage possessed by mica allows the material to be easily split into these thin films. The splittings are about 1/1000 of an inch thick, are irregular in shape and outline, and may contain a small quantity of flaws. They are so thin that a bunch of them feels like a mass of crumpled tissue paper. A small quantity of such splittings accumulates in the sheeting and trimming of the mine-run mica, but most of them are made by splitting up the smaller sheets of mica, especially the stained or spotted mica. In India, where most of the splittings are produced, the work is largely done by women and children." (U. S. Geological Survey, Mica in 1918, p. 659.)

This quotation aptly describes our raw material.

"After the sheet mica has been all split into films of uniform thickness they are reassembled into a large plate, being fastened together by means of an insulating cement under the application of heat and pressure. The thin films or splittings, in addition to being of uniform thickness, must have no thick edges or corners and must be free from all inclusions of hard mineral grains, so that the final built-up plate can be compressed to a uniform thickness. The splittings are laid irregularly one on the other either by hand or by specially devised machines. Shellac is the binder used; it must be spread evenly and thinly over all the splittings; when the mica board is finally compressed and ready for use, it should have a uniform thickness and density, very low compressibility, and a binder or cement content of three to five per cent, preferably the lower figure, and should show almost no shrinkage, slipping or oozing of cement. The standard size of the board is 18 inches by 36 inches. Muscovite and phlogopite or amber-mica splittings are both used, either separately or in various mixtures, to form parts with slightly different properties. The built-up mica board is used chiefly for commutator segments and end rings and, in special shapes and sizes, either cut or molded, in dynamos, motors, and transformers," and in electrical heating appliances. (Mica in 1918, pp. 659–660.)

In this country built-up mica, as manufactured by various plants, is known under special trade names such as "micanite," "micabeston," and "micabond," etc.

This aptly describes our finished products.

According to the only available recent figures, taken from the above-named pamphlet (p. 641), there were consumed in the United States in 1917, 2,684,000 pounds of splittings, and in 1918, 1,956,000 pounds, of which, according to the figures of the United States Geological Survey (p. 632), there was produced in the United States in 1918 a total of only 11,000 pounds.

From the above it will be seen that, in spite of the stimulation of the mica mining industry in the United States due to the World War, there was produced in this country approximately one-half of 1 per cent of the total amount of splittings required in this country. As before stated, the reason for this is found in the fact that very little mica of a grade suitable for the making of splittings is mined or has been found in the United States. The quality of the mica mined in the United States does not lend itself to the production of splittings suitable for use by our trade. In fact the growing demands of the electrical industry for mica board, built-up mica, and products made from mica has become so large that even if all the sheet mica produced in the United States were available for the making of suitable splittings only from one-third to one-half of the domestic requirements for splittings could be filled.

Again we take the statistics from the Geological Survey pamphlet in proof of the above assertion.

Year.	Sheet mica produced in United States.	Making splittings equal to—	Splittings consumed in United States.
	Pounds.	*Pounds.*	*Pounds.*
1917	1,276,533	766,000	2,684,000
1918	1,644,200	986,520	1,956,000

Owing to the fact that all importations of cut mica, mica splittings and built-up mica, and manufacturers of mica are grouped together by the Government for statistical purposes, there are available no figures by which we can determine the amount of built-up mica imported into this country. Owing to the war and the consequent demand for mica and its manufactures for war purposes, no attempt to estimate the amount of probable importations hereafter as compared with importations heretofore made, even if such were procurable, would be of value and we consequently can not furnish the committee any figures in relation to this question which would be of the slightest assistance.

Under the Payne-Aldrich tariff act of August 5, 1909, mica was provided for in paragraph 91, reading: "Mica, unmanufactured or rough-trimmed only, 5 cents per pound and 20 per centum ad valorem; mica, cut or trimmed, mica plates or built-up mica and all manufactures of mica or of which mica

is the component material of chief value, 10 cents per pound and 20 per centum ad valorem." Against the assessment by the Government of a duty upon mica splittings of 10 cents per pound and 20 per centum ad valorem the importers, in the case of U. S. v. Myers (1 Ct. Cust. Appls., 257), were successful in their contention that mica splittings were not manufactures of mica, and were dutiable only at 5 cents per pound and 20 per centum ad valorem under the provision for "Mica, unmanufactured, or rough-trimmed only."

For reasons unknown to us, Congress, in the act of 1913, removed mica splittings from the classification of "Mica, unmanufactured," in which this decision of the court had placed it and provided for such splittings in the same category and at the same rate as articles made therefrom. As a result of this classification under the act of 1913, unmanufactured mica was made dutiable at 25 per cent and mica splittings at 30 per cent. In all probability Congress intended by this differential of 5 per cent to make allowance for the labor applied to crude mica in order to produce splittings. To this we take no exception nor do we offer objection to the rate of 30 per cent ad valorem now applicable to splittings under paragraph 77, tariff act of 1913; but we do insist that both logic and necessity require that the manufacturers of mica plate, mica board, built-up mica, and manufactures of mica, made from mica splittings protected to the extent of 30 per cent, be given a rate of protection double that imposed on their raw material to equal the higher original cost of the raw material and the duty placed thereon.

The built-up mica manufacturers of the United States represent an invested capital of from $2,500,000 to $3 000,000, and employ approximately two to three thousand operatives. Built-up mica is an American invention and the industry employed in making it is expanding proportionately with the increased use of electrical appliances in which mica plays so important a part. It is safe to say that the increase in mill electrification and general installation of electrical apparatus and appliances has been increased many hundred per cent within the last five years. In this increase in the electrical field built-up mica plays an indispensable part because no substitute has been found to take its place as an insulating material of equal value.

The chief foreign competitor the domestic industries have to fear at the present moment is India, where it is notorious that labor can be secured at wages which would scarcely pay the car-fare of an American laborer. We have no authoritative data available of the cost of production of built-up mica in India, but wo do know the price at which we can buy Indian mica splittings in India and that Indian labor costs not more than one-seventh of the cost of corresponding labor in the United States.

Based upon this knowledge and upon our actual costs of production we submit the following table:

Cost of surfaced commutator segment plate (0.020 inch thick).

	United States.	India.
1.46 pounds splittings	[1] $0.5694	[1] $0.3996
1.128 pts. cement, at $0.10½	.1184	.1184
Net labor plus 100 per cent overhead	.32	.05
Total	1.0008	.5680
10 per cent selling expense	.10	.0568
Cost	1.1008	.6248
Freight to United States		.025
Cost in United States	1.1008	.6498

[1] See note 1, page 561.

Selling price in United States $1.32.

Cost of unsurfaced molding plate (0.020 inch thick).

	United States.	India.
0.92 pounds splittings	[1] $0.3496	[1] $0.2484
0.94 pts. cement, at $0.165	.1544	.154
Net labor plus 100 per cent overhead	.2500	.04
Total	.7540	.4428
10 per cent selling expense	.0754	.0442
Cost	.8294	.4780
Freight to United States		.025
Cost in United States	.8294	.5120

Selling price in United States $1.05.

[1] The price of mica splittings in India is 1s. 6d. per pound, which has been reduced in these tables at the prevailing rate of exchange on the date this brief was written and equals $0.27. The United States cost of splittings in these tables is predicted upon the same first cost of 1s. 6d., which, reduced at the same rate equals $0.27, plus an addition of 30 per cent for United States duty on splittings and plus 2½ cents per pound freight equals $0.38.

Throughout, these calculations have been based upon the assumption of uniform first cost of material in both India and the United States. We believe that the first cost of the materials in India is far lower than we have estimated and, if we are right in such assumption, the actual Indian cost of production is considerably lower than we have shown herein.

In the foregoing tables the only factors upon which we have received any information are those of the cost of splittings and of labor in India. In the estimated costs of production in relation to the other factors we have allowed to India the same costs and percentages of overhead and selling expenses as we ourselves incur, with the result that we believe that our estimated Indian production costs have in fact been calculated much higher than would be disclosed if the data and factors entering into Indian costs of production were available to us. We have also stated at the foot of each table the United States selling price of the article, from which it will be seen that our profits over and above the cost of production are approximately 25 per cent. From these tables it will be seen at a glance that a duty of 60 per cent upon imported built-up mica will make the landed, duty paid cost thereof, just about equal to our cost of production, thus enabling us to compete with Indian production which is favored by cheap available native sources of raw material and the cheap child labor for which India is notorious.

The India Government has been taking great pains in the past few years to encourage the manufacture of built-up mica in India, in order that full advantage might be had of the cheap labor and the indigenous products of mica and shellac, and there have been established during the past two or three years in India several factories for the manufacture of built-up mica. These factories are heavily financed by large English and India mica exporters and dealers, and being fully alive to the demand for micanite in the electrical industry of the United States will prove formidable competitors to the manufacturers of built-up mica in the United States.

We herewith submit the proposed wording of a paragraph which we believe will effect the desired results, again calling the attention of the committee to the necessity of providing an ad valorem rate for built-up mica and all manufactures of mica double that of the ad valorem rate made applicable to mica splittings.

"Mica, unmanufactured, valued at not above 15 cents per pound, 4 cents per pound, valued above 15 cents per pound, 25 per centum ad valorem; cut mica, 30 per centum ad valorem; mica splittings, 30 per centum ad valorem; built-up mica and all manufactures of mica, or of which mica is the component material of chief value, 60 per centum ad valorem; ground mica, 15 per centum ad valorem."

CHICAGO MICA CO.,
Valparaiso, Ind.
KEENE MICA PRODUCTS CO.,
Keene, N. H.
MACALLEN CO.,
Boston, Mass.
NEW ENGLAND MICA CO.,
Waltham, Mass.
MICA INSULATOR CO.,
New York, N. Y.

BRIEF OF THE ASHEVILLE MICA CO., BILTMORE, N. C.; J. E. BUHLESON, SPRUCE PINE, N. C.; AND THE TAR HEEL MICA CO., PLUMTREE, N. C.

DEAR SIR: We respectfully request that your committee make the following tariff schedule on mica:

> Mica, unmanufactured or rough trimmed only and mica splittings, 25 cents per pound and 50 per centum ad valorem; cut, stamped or trimmed, built-up mica and all manufactures of mica, or of which mica is the component material of chief value, 50 cents per pound and 50 per centum ad valorem; phonograph diaphragms, 10 cents each and 50 per centum ad valorem; refuse, fit for grinding purposes only, 1 cent per pound; ground, flakes, and dust, 2 cents per pound.

From over 30 year's experience in the mica business, both manufacturing and mining, as well as importing and handling all qualities of imported mica, we believe it will require the above schedule to put the domestic miner on an equitable basis with the India miner. To enable you to correctly estimate the situation and od justice to an industry, which though comparatively small is a most important one, and protect American labor engaged therein against what is probably the cheapest labor in the world, namely India; we submit for your perusal the following facts:

The varieties of domestic mica are equal in quality with the Indian varieties, both for use in stoves and all electrical insulation, and splittings made from it are as good for built-up plate as the splittings made from India mica.

India has the advantage of larger developed mines, which means a relatively lower operating cost and has at all times a surplus supply of cheap labor. Until domestic miners are adequately protected, no large developments are possible and mica of inferior grades mostly will be mined, because veins producing the high quality mica are at deeper levels and are less prolific.

Cost of labor in India.—We call your attention to India labor, because India is far the greatest mica-producing country, as will be seen from the following table taken from United States Geological Survey, Mica in 1918, by U. T. Schaller:

World's production of sheet mica, 1900–1918 (short tons).

Year.	United States.	India.	Canada.	All other countries.	Total.	Percentage of total represented by production in United States.
1900	228	1,026	.....	1	.....	.....
1901	180	1,274	.....	1	.....	.....
1902	187	1,143	.....	85	.....	.....
1903	310	1,206	.....	39	.....	.....
1904	334	1,108	.....	13	.....	.....
1905	462	1,282	.....	15	.....	.....
1907	530	2,610	387	54	3,581	15
1908	486	2,677	218	125	3,506	14
1909	905	1,645	185	122	2,857	32
1910	1,238	1,135	379	173	2,925	42
1911	944	1,695	295	207	3,141	30
1912	423	2,192	290	217	3,122	14
1913	850	2,288	552	190	3,880	22
1914	278	2,026	298	21	2,623	11
1915	277	1,357	209	58	1,901	15
1916	433	2,430	604	79	3,516	12
1917	638	2,291	583	218	3,730	17
1918	822	2,062	374	.....	.....	.....

The average wage paid to the Indian laborer is approximately 30 cents per day, and for women and child labor, which is largely used in trimming and making mica splittings, the wage is much less.

Cost of domestic labor.—The average wage paid to the American miner is $3 per day.

Cost of India mining.—We give below figures on mining costs in India, which are taken from the prospectus of the J. N. De Mica Mining Co. of 1920, a well-known mica company of many years' mining experience in India, and are as follows:

"All sheet mica produced, 1 inch by 1 inch (punch) and larger, knife trimmed, 5 cents per pound."

Cost of American mining.—Our costs are prepared from figures submitted by many miners in North Carolina and cover operations in 1920, and are as follows:

All sheet mica produced, 1 inch by 1 inch (punch) and larger, only thumb trimmed, 30 cents per pound; or if knife trimmed to bring it to same condition as that imported from India, 54 cents per pound.

The difference in the cost between India and domestic is, therefore, 49 cents per pound for knife-trimmed mica and is a very conservative figure. In our judgment if a corporation, with attendant overhead charges, etc., were to undertake mining it would cost considerably more. We, therefore, feel justified in asking a duty of 25 cents per pound and 50 per cent ad valorem on unmanufactured mica, and as this trimmed mica wastes approximately one-half in cutting or stamping to size, the specific duty on cut mica necessarily should be double the duty put on unmanufactured, or, as it is sometimes termed, uncut mica.

The percentage of domestic production to importations of foreign mica is important in showing the competition domestic mica has to contend with. The table below is from the United States Geological Survey, 1918:

Year.	Mica produced and sold in the United States.	Mica imported for consumption in United States.	Year.	Mica produced and sold in the United States.	Mica imported for consumption in United States.
1909	$280,529	$618,813	1915	$428,769	$692,269
1910	337,097	725,823	1916	504,391	1,071,356
1911	356,804	505,552	1917	806,782	1,430,048
1912	331,896	755,584	1918	764,940	1,541,129
1913	436,060	947,783	1919	(1)	1,632,800
1914	329,966	629,484	1920	(1)	[2] 3,170,174

[1] Figures not available. [2] 11 months only.

Mica splittings.—Before the invention of micanite, or built-up mica, it was estimated that 80 per cent of the mica mined was waste. Since this process was introduced spittings for built-up mica (micanite and other names), as well as other uses for electrical purposes, have taken care of this surplus of small mica to a large extent. However, the domestic miner or dealer, on account of high labor costs, can not make use of much of this small mica for splittings, whereas the Indian producer with women and child labor can turn all his small mica into splittings, and the Indian splittings have practically a monopoly. We give below from the United States Geological Survey, 1918, page 641, figures to show quantity of splittings used and their origin:

Mica splittings consumed in the United States (short tons).

Origin.	1917	1918	1919 (estimate).	
			Number of consumers.	Quantity.
	Short tons.	*Short tons.*		*Short tons.*
India	790	584	13	663
Canada	485	329	11	376
United States	67	64	6	72
South America	9	1	.....	0
Total	1,342	978	.....	1,111

Canadian splittings are made from phlogotite and this variety of mica is not found in the United States. On account of the softness of phlogotite mica it is used for special purposes.

Splittings are thin pieces of mica three-fourths to one and one-fourth thousandths of an inch thick. To manufacture them there are two distinct oper-

ations, involving considerable labor in each. First the sheet mica is closely knife trimmed, causing a waste of upward of 40 per cent of the rough mica piece. Secondly the closely knife-trimmed mica is split with a knife by an operator into thin sheets three-fourths to one and one-fourth thousandths of an inch. The output per day of one operator is 4 to 6 pounds. It has been found in India that child labor is especially skilled in this work of making splittings, and hence children are largely used and the cost is 3 to 5 cents per pound. With domestic labor the making of these splittings costs from 30 to 50 cents per pound.

Some years ago a large electrical corporation invested several hundred thousand dollars in developing mica mines in Dakota, in order to supply their requirements in mica splittings, Dakota mica being soft and especially adapted to this purpose. They could not compete with India prices and were compelled to shut down their operations with heavy losses.

Mica diaphragm disks.—This manufactured article is made by highly skilled labor and from the very finest mica. They were manufactured principally in Germany and England before the war. Manufacturers prefer domestic mica to foreign mica, but in the present state of domestic mining they must rely upon India mica; on which the English have the first call. In 1918, 22 tons of foreign mica was used for phonograph disks in the United States and 13 tons of domestic.

Importers of foreign mica have stated to your committee that the present tariff is sufficient to protect the domestic miner. We respectfully state they have little or no knowledge of the cost of domestic mining and are not qualified to state what tariff is sufficient protection. They also stated that domestic mica is not as flexible as India and does not wind as well in making tubes, and in other cases does not meet the requirements of certain lines of manufacture. This we emphatically deny. The facts are, prices govern use. Some southern varieties are, no doubt, harder than India, but the softer varieties are equally as soft and the South Dakota mica is even more suitable for splitting and winding. We have sold large quantities of domestic mica for every kind of electric apparatus with every satisfaction.

The facts disclosed in the United States Geological Survey—mica, 1918—showed the urgent need of a high quality mica for war purposes and stated high prices if paid to domestic miners would not meet the situation; hence they were compelled to request the Government of Great Britain to release mica for the United States Government uses.

It is true higher prices to domestic miners at that time would not have produced larger quantities, for the notice was too short. It would have been months before the old shut-down mines producing fine mica would have produced any, and the fact that labor was about unobtainable, more particularly in Georgia, where so much high quality of mica is found, prevented large developments. Increase in quantity of domestic did come in 1919 and 1920.

The demand and urgent need of India mica increased their production during 1918, 1919, and 1920, and they now have a surplus and are offering it in much larger quantities and at reduced prices, so that domestic miners to-day are threatened and have a lack of demand for their product. The consequence is the domestic miner is not producing as much as formerly, and if this state of affairs continues domestic production will gradually dwindle, which in turn will put the United States in a more dependent condition on India than ever, and in case of war the United States Government will again have to ask Great Britain to supply much of her requirements in mica.

BRIEF OF THE COLUMBIA GRAPHOPHONE MANUFACTURING CO., BRIDGEPORT, CONN.

The Columbia Graphophone Manufacturing Co. is a manufacturer of Grafonolas and disk talking-machine records on a very large scale, employing many thousands of workmen at its principal plant, located in Bridgeport, Conn. In one of the constituent parts of its Grafonolas it uses mica, and its annual consumption of this product is very substantial in this one particular.

Part of the equipment of every Grafonola, regardless of price, is a sound reproducer, or sound box as it is sometimes termed. This reproducer carries a diaphragm, and mica is utilized exclusively for the purpose.

These mica diaphragms are made in different sizes or diameters, but the Columbia Graphophone Manufacturing Co. employs but one size on its different types of Grafonolas, 2⅜ inches. This is a much larger diaphragm than some other manufacturers use, and the fact is important.

The mica used in these diaphragms must be of a high grade, free of waves, holes, bubbles, or other imperfections, and as clear as it is possible to obtain it. This also is an important fact to be remembered.

Mica comes principally from domestic mines, from India, Brazil, and Argentina. The best mica for diaphragms comes from India.

The next best grade for diaphragms comes from Brazil and Argentina. The domestic mica is wholly unsuited for diaphragms because of its inferior quality, its defects, and imperfections. None, or practically none, of it is available or is used for the manufacture of diaphragms. The manufacturers of diaphragms in this country use the imported mica only. They will be compelled to continue the use of imported mica for making phonograph diaphragms no matter what duty is imposed on the imported mica.

In the manufacture of a mica diaphragm several simple steps or operations are necessary. The work is not complex or difficult, and no greater skill or expertness is required than can be taught an employee of average intelligence in a month or two. No mechanical training or apprenticeship is necessary. The different steps or operations are approximately as follows:

1. The raw material is split to the thickness desired.
2. Punched or cut into circles or cut into squares.
3. Arranged in stacks about 3 inches long with paper between each layer of mica.
4. Stacks placed in a lathe and turned to the approximate diameter required.
5. The edges finished or smoothed while still in the lathe.
6. Wrapped in packages of 100 each for shipment.

It will be evident that this calls for no high standard of skill and that moderate-priced labor can be used.

It should be understood that the sheet, piece, or fragment of mica from which a diaphragm is to be obtained must be larger than the given diameter of the finished article so as to permit of the necessary shaping, trimming, and finishing.

The labor involved is the same exactly in a small or large diaphragm, and consequently the labor cost is the same.

But there is a vast difference in the cost of the material entering into the construction of the diaphragm.

On page 458 of the committee print of the hearings of January 11, 1921, Mr. Charles P. Storrs, of the Storrs Mica Co., Oswego, N. Y., gives a comparative table of the domestic and India mica prices. The domestic of the size of 3 by 3 inches costs $1.85 per pound, whereas the corresponding size in India mica (No. 3) costs $2.77 per pound. The next smallest size is the No. 4 and its size is 2 by 3 inches, and its cost $2 per pound.

It will be obvious that a diaghrapm 2¾ could not be secured from No. 4 because it is too small, bearing in mind that the cutting must be larger than the finished diameter. It is therefor necessary to employ the No. 3, and the cost is greatly in excess of the cost of the domestic of a corresponding size and double that of the domestic of a corresponding size to No. 4 and four times as much as if made from the smaller sizes.

This added cost of material, of course, must be paid by the consumer—in our case the Columbia Graphophone Manufacturing Co.

It is obvious that if the domestic mica was usable at all for diaphragm purposes, the phonograph manufacturer would use the cheaper material to the exclusion of the imported article, inasmuch as the reproducer or sound box being a part of the complete phonograph must be supplied gratis when the phonograph is sold.

AMERICAN MICA MINING NOT STIMULATED BY HIGH TARIFF.

Mr. Storrs in his statement makes clear that domestic mining of mica has not been stimulated at all by the existing tariff, which has been in force since 1913, and in this he is corroborated by the witnesses he refers to and from some of whom he submits letters.

On page 464 of the same hearings of January 11, 1921, appears the statement of Mr. Herbert W. Smith, of the American Mining Congress. Mr. Smith confirms the statement of Mr. Storrs that because of the inferior quality of domestic mica it is not suitable for use where a clear surface, freedom from waves, bubbles, or scales is essential and that the imported mica must be used. Mr. Smith describes a specimen he obtained in New Mexico, but he does not say that it is equal to the Indian mica or that it can be mined in quantity.

Mr. Storrs opposes any increase in the duty on the raw mica or uncut, split, or built-up mica, and we join in recommending that no increase in either be approved.

Domestic mines are now producing to their full capacity, consequently an increased duty would not benefit them in the least, but would add substantially and needlessly to the burden of domestic manufacturers who are compelled to employ the imported product, no matter how high its cost.

There is no known substitute for the imported article. Costly and protracted experiments have been conducted by phonograph manufacturers to find a substitute for the mica diaphragm, but unavailingly. They have tried also to use the domestic mica, but invariably have been forced to return to the use of the imported article.

The supply of mica suitable for diaphragm use is very limited even abroad, and as has been shown practically nonexistent in commercial quantity domestically. It is therefore submitted that no additional handicap in the form of an increased duty should be imposed.

The same conditions which compel use of imported mica for diaphragms apply equally to other manufactured mica products. Mica is used extensively in the making of other articles in which the domestic product can not be utilized because of its inferior quality. This is unfortunate, but it is true. Mica with spots, waves, bubbles, wrinkles, or holes can not be used, and that means that the imported article must be resorted to.

Mr. Storrs in his statement said that no matter what duty was imposed they—the mica manufacturers—would continue to bring it in. This is literally correct and for the reasons stated.

This being so, any increase in existing duties would be a mistake.

MANUFACTURERS OF MICA DIAPHRAGMS AMPLY PROTECTED.

The Columbia Graphophone Manufacturing Co. is one of the largest users of mica phonograph diaphragms in the world. Its business has been established more than 30 years, and during the most of that period it has used these mica diaphragms in varying quantities, and it has obtained the most of those used from domestic sources. At the present time it purchases in the neighborhood of a million per year, and at least 80 per cent is secured from American manufacturers. The remaining 20 per cent if purchased from other sources was not on account of price competition but for other and purely local causes.

At no time in many years has the company been forced to resort to foreign manufacturers for supplies on account of price competition, the present rates of duty making it possible for the American manufacturer to import the raw material and manufacture at a price to compete with the best foreign quotations and to obtain a reasonble profit.

At the present time the company has a firm offer from one of these American manufacturers to supply it with a quantity of these diaphragms made of the best India mica of the standard size uniformly used by the company at 30 cents each f. o. b. New York. No European manufacturer could quote a better price, or would try to do so, or could make delivery if he did.

Mr. Storrs in his statement says that possibly manufacturers of diaphragms may ask for an increase of duty, but he does not indorse or recommend such action. He merely says he has nothing to do with that, although he thinks it might be equitable. If he had believed it necessary or essential it is fair to assume that, with his intimate knowledge of the mica industry and its different aspects, he would have favored the committee with more positive recommendations had he believed that any additional protection of any kind to diaphragm manufacturers was either needed or that the future offered any greater handicaps to them than at present exist.

To add anything to the present cost of the phonograph diaphragm would be to penalize the phonograph manufacturer for the exclusive benefit of a small group of manufacturers of diaphragms.

The phonograph industry in this countrty is a very large one, giving employment to many thousands of workmen. The Columbia Graphophone Manufacturing Co. employs, under normal conditions, eight to ten thousand workmen and disburses over $100,000 per week in pay roll. Other large manufacturers of phonographs in this country employ many additional thousands of workmen and disburse large sums for pay-roll purposes.

The total number employed by all diaphragm manufacturers in the United States does not exceed in all probability 1,000 people with a pay roll in proportion.

To add to the cost of the diaphragms means that the phonograph manufacturer must either absorb that additional cost or pass it on to the consumer by an increase in the price of his complete phonograph, and thus the public would bear the burden. This latter course would not be feasible because the reproducer or sound box which carries the diaphragm is an integral part of the complete phonograph, and hence not easy of price augmentation. The manufacturer would have to absorb that increased cost. When it is remembered that the diaphragm is not easy to obtain; that it is a necessary part of the machine; that the supply of mica in this country is too limited and too inferior to afford any relief in the future and that the American manufacturer of diaphragms made of imported mica is amply protected and can and does successfully compete with foreign makers, it is urged that no increase in present rates be approved.

Such increase would be highly unjust and unfair, and we earnestly recommend that the present rates be permitted to stand.

BRIEF OF WATSON BROS., BOSTON, MASS.

We have read Mr. Storrs's statement of January 11, 1921 (Schedule B, par. 77), and agree with him fully that no increase in duty on raw mica is necessary or advisable, and that the American miner does not need further protection, as he is producing now all of the mica suitable for the manufacture of diaphragms he can under any conditions.

The existing protective tariff has not stimulated diaphragm production from domestic mica, notwithstanding present duty has been in effect since 1913. From our knowledge of the mica industry in this country, no amount of increased duty will effect any greater stimulus than the existing rate has done, as the total quantity available fort his purpose is an exceedingly small per cent of that required.

As to mica diaphragms, we are one of the largest, if not the largest, manufacturers of this article in this country, and do not favor an increased duty for the reason that the domestic mica can not be used for producing these diaphragms to any extent, both on account of its quality and the scarcity of a grade suitable for this purpose. Consequently, we must have imported mica, and the present duty of 30 per cent ad valorem on mica diaphragms is, from our experience, ample protection to American manufacturers, and enables us as well as all other American manufacturers to compete at a profit with foreign manufacturers of mica diaphragms.

F. L. WATSON.

SANITARY EARTHENWARE.

[Paragraph 78.]

GEORGE G. DYER, REPRESENTING THE SANITARY POTTERS' ASSOCIATION, TRENTON, N. J.

Mr. DYER. Mr. Chairman and gentlemen of the Ways and Means Committee, my name is George G. Dyer, Sanitary Potters' Association, Trenton, N. J. I desired to speak orally for the association or for the industry, but I would like to say that I was unexpectedly called upon to get ready at 10 o'clock Saturday morning. I have done the very best I could to get the information together to present to you as to why we feel that our industry should have some protection.

I would like to say that from 90 per cent of the industries in this country we gather these figures: The total employees in the sanitary pottery industry number 6,554, of which about 6,000 are highly paid skilled workers. The total business done from November 1, 1919, to October 31, 1920, using that as an average year, was something like $27,000,000—$26,695,717, to be exact. The total imports so far as

known up to September, 1920, of sanitary earthenware, covering a period from July, 1915, to that date, is $40,282. Granted a very, very small total of imports; but I would say in reference to that that the small volume of imports was due entirely to the war and nothing else. We were confronted with a possible flood of imports from England during 1914. It had made its appearance in Boston, New York, Philadelphia, and San Francisco. But, due to the war, as I have said, a lot of this material never reached this country. I refer then to orders. In San Francisco alone one order aggregating more than the total imports for five years had been placed by an American firm with an English firm—that was in 1914—and just at that time, and before the order could be shipped, war had been declared, naturally everything was off.

Mr. GARNER. What was the amount of that order?

Mr. DYER. We have nothing but an approximate figure. I would say in reference to that, Mr. Garner, that one is a wash-down bowl commonly known as a water-closet. The other was the tank to operate that. We have a price of $1.92 on the bowl, but my informant tells me he was unable to get the price on the tank.

Mr. GARNER. Well, approximate the amount of the order.

Mr. DYER. All right, $45,000.

Mr. GARNER. That is more than had been imported in the past five years, up to that time?

Mr. DYER. Yes, sir.

Mr. GARNER. How much did the consumption at that time approximate—what it does now?

Mr. DYER. Yes; I would say about the same; probably a little bit more.

Mr. GARNER. Your production at this time, you say, is about $27,000,000 a year?

Mr. DYER. Yes, sir; 90 per cent of the industry.

Mr. GARNER. That would be less than one-tenth of 1 per cent?

Mr. DYER. Yes, sir.

Mr. GARNER. It would be about one one-hundredth of 1 per cent?

Mr. DYER. We grant that.

Mr. GARNER. You really think, now, that with an import of that volume—for instance, that one order—it would take more than 500 years to put you out of business.

Mr. DYER. No; we do not claim that. But we do say this, that one order was given by one jobber. There are probably 10 jobbers in San Francisco and surrounding towns alone that could place equal amounts, not to speak of the New York district.

Mr. GARNER. What is the present rate of duty on that?

Mr. DYER. Thirty-five per cent ad valorem.

Mr. GARNER. That is one time the Underwood bill probably got a little above competitive tariff.

Mr. DYER. But I would say that we do not at the present time worry much about that, because England is in the midst of her own reconstruction at the present time; but we do expect that this tariff law that is to be enacted will last more than two or three years, or maybe longer than the present Underwood tariff law. I hope so, at any rate. To protect our industry for a period we are trying to look forward, and not alone to the fact that our imports were

just a very small amount. They would have been probably $5,000,000 and maybe $7,000,000 if the war had not intervened. But we do look to you gentlemen in this respect, to look forward to what is menacing us. I will drop England. I will say this for Japan: The Japanese to-day are installing modern methods of producing sanitary earthenware. They have under construction in the city of Sito, Japan, what is known as the last thing in sanitary pottery for fire and tunnel kiln, continuous kiln. It has proven successful in this country, and they are imitating us largely.

Let me just illustrate. I hope I will not transgress on your time. To show how cunning these Japanese are: In 1914 I was employed by the Trenton Potteries Co., the largest manufacturers in the United States, and possibly in the world, of sanitary earthenware. Letters had come in stating that a certain Japanese official, or gentleman, would arrive on a certain day and he wanted to be shown through the factory and possibly purchase large quantities of sanitary earthenware. We made every preparation to give him a royal welcome, expecting to get a very, very large order. What we got from that gentleman was a sample order for the very best sellers we had, and inside of six months they were imitating them in Japan, and they do not use them in Japan. They make them for this market, or will make them for this market. I am not speaking, gentleman, for any present protection. I am speaking for a protection that we are bound to need within the next three or four years, probably sooner.

I would say in reference to the imports that we have nothing later than September of last year. I have taken up with the American consul at Stoke-on-Trent, which is a combination I believe of some five little towns in Staffordshire which produce most all the sanitary ware that is used in England, to try to get the imports of sanitary earthenware for the last period of this year, or of last year, from September to December. He wrote us back and told us that his office force is so inadequate that he could not do it. Fortunately, we had a man that was going through Japan. He was observant. He was a man thoroughly alive to the industry in America, and he got the information that we wanted. Now, gentlemen, listen. What is known as a wash-down bowl—sanitary pottery units are based on the wash down because it is 65 per cent of the business—in Japan with the casting process a workman makes four of those bowls for one day's work. He is paid the magnificent sum of 15 cents each for those bowls, making 60 cents a day. In our country our workman makes 10 of those bowls by the same process, and he is paid $9.40 a day. Is not that significant?

The CHAIRMAN. Ninety-four cents as against fifteen?

Mr. DYER. Yes, sir. That is significant. I think I need not say any more so far as Japan is concerned.

Mr. GREEN. What proportion of your cost is labor?

Mr. DYER. I should say 65 per cent, Mr. Green.

Mr. HAWLEY. How many people are engaged in the industry in this country?

Mr. DYER. The total?

Mr. HAWLEY. Yes.

Mr. DYER. As far as I can get it, I have tried to make a census, that 6,554 to be exact made 90 per cent.

Mr. BACHARACH. Did you make the statement that 6,000 were skilled men?

Mr. DYER. Six thousand of those are skilled workmen, ranging anywhere from $8 to $9 to $12 a day.

Mr. RAINEY. How many consumers are there in the United States for these goods?

Mr. DYER. I can give you some statistics in regard to that. Something like 25,000,000 homes in the United States, and there are less than 5,000,000 homes equipped with water-closets and sanitary appliances.

Mr. RAINEY. It would be a good plan, from the standpoint of the health of this generation, to encourage some of these importations if that would make them cheaper.

Mr. DYER. I do not think so. We are unable at the present time to keep our own 6,000 men fully employed. I would say to the gentleman, at the present time we are working 50 per cent of production to-day. I would say in reference to our workmen that they are gradually making themselves felt. They are an intelligent bunch. They are educating their children. We are helping them along those lines, too. They are educating their children, making judges of them. They are making lawyers of them.

Mr. RAINEY. Did it ever occur to you that the consumers should be entitled to some consideration?

Mr. DYER. Absolutely. I will tell you what we are doing for the consumer; we are making his health better.

Mr. RAINEY. You say there are only 5,000,000 homes furnished with sanitary toilets?

Mr. DYER. That is the last statistics, Mr. Rainey.

Mr. RAINEY. I thought you might make them cheaper, so as to get them in 10,000,000 homes.

Mr. DYER. We are trying to furnish those 10,000,000 homes with real genuine American stuff.

Mr. RAINEY. You said a while ago, Mr. Dyer, you were trying to educate lawyers.

Mr. DYER. Let me say this: We are trying to protect the health of the people of the United States to this extent, that the material we make is absolutely nonabsorbent, and the material that we are going to get from Japan is absorbent.

Mr. RAINEY. You never brought that out, that you are making it better.

EARTHENWARE AND CHINAWARE.

[Paragraphs 78, 79, and 80.]

THEODORE JONES, REPRESENTING THE WHOLESALERS OF EARTHENWARE AND CHINA, BOSTON, MASS.

Mr. JONES. Mr. Chairman, I had hoped that my few remarks would follow the American manufacturers, but, as it seems that is not to be, I would like to ask the privilege of dividing my time.

(Mr. Jones read his brief, as follows:)

SIR: We address you on Schedule B, paragraphs 78, 79, 80.

This committee represents the wholesalers of earthenware and china throughout the United States, whose business is the distribution of both domestic and

imported wares and in both classes of these products we are all heavily interested.

We all buy and sell large quantities of the American-made goods, while at the same time we import and distribute foreign crockery and china, so that we feel that we are in position to discuss the question fairly and intelligently.

The potteries of the United States do not produce all the varieties of wares required by the consumers of this country so that it is necessary for us to import many kinds from abroad.

We recognize the great progress which has been made by the manufacturers of this country and which is evidenced by the following statistics:

Comparison of imports and domestic production, china and earthenware.

	Imports.			Domestic production.		
	1913	1919	Decrease.	1913	1919	Increase.
			Per cent.			*Per cent.*
Earthenware	$3,047,000	$2,800,000		$15,066,000	$29,700,000	
China	6,900,000	4,100,000		2,424,000	7,625,000	
	9,947,000	6,900,000	30	17,490,000	37,325,000	113

EXPORTS FROM UNITED STATES.

	1913	1919	Increase.
			Per cent.
China and earthenware	$550,000	$1,700,000	210

These figures of the immense increase and progress of domestic potteries compel the conclusion that the question of more "protection" may be dismissed; the present tariff rates apparently being abundant and possibly too high to permit competitive importations.

Figures quoted do not include domestic production of sanitary ware, chemical porcelain, and stoneware, yellow and Rockingham ware, amounting to about thirty-five millions, on which lines there is no competition from imports, the freight alone on such wares being practically prohibitive.

We believe, gentlemen, that these figures abundantly demonstrate the great prosperity of the American pottery industry at this time.

During the period of the Underwood tariff, from 1913 to 1919, the American production has increased from about $17,500,000 to about $37,500,000, or 113 per cent, while during the same period imported wares have decreased from $10,000,000 to $7,000,000, a decrease of 30 per cent. The exports of china and earthenware for the same period, however, have increased from $550,000 to $1,700,000, or about 210 per cent.

In all our quotations you will note that we do not include domestic production of sanitary wares, chemical porcelain and stoneware, amounting to about $35,000,000 per annum, and on which lines there is no competition from imports, the freight alone on such wares making importation practically prohibitive.

We, therefore, feel that we may dismiss the question of any additional protection being required.

We believe, however, that a moderate reduction of the rates on earthenware would result in bringing increased revenue to the Government and would at the same time assist in reducing the selling prices to the consumer. The present high prices are very onerous on the public and the demand for reduction is loud and emphatic throughout the land. The bulk of all earthenware imported into this market comes from England and amounts to about 90 per cent of total quantity imported—6 per cent coming from Japan and 4 per cent from other countries.

We realize and appreciate the great task before the Government of raising additional revenue and would beg to suggest that one of the quickest ways

to effect this, would be for the Secretary of the Treasury to assess duties on a higher rate of exchange.

We notice in the hearings before your committee on December 10 that the representative of the United States Potters' Association presented a plan for a new basis for assessment of duties, viz, to asses duties on the wholesale selling price in the United States. We are absolutely opposed to any such method, and for the same reasons that we expressed against the same proposition in 1908 and noted in tariff hearings of the sixtieth Congress before the Ways and Means Committee, first print, No. 13, November 23, 1908.

It is impracticable and unworkable—wholesale values are variable and not uniform in the chief distributing cities of the country. The price of an article in Boston is totally different from the price of same article in San Francsco or New Orleans. Again, a great variety of goods are imported which are not produced in the United States and therefore there could be no basis of comparison with a domestic article that does not exist.

Frankly, the whole plan is deceptive, because it would give the impression to the public that the rates of duty had been lowered, whereas in fact the plain intention is to increase them.

Such a method is, we believe, un-American, and all former attempts to impose this plan have been unsuccessful.

We further believe that the present system of assessing duties on the wholesale market value in the country of production is the only fair and practicable method.

We have, however, one suggestion to offer on the subject, viz, that dutiable value shall be the wholesale export price in the country of production, provided that in no case shall this be less than the wholesale home market price.

This committee will be glad to furnish any information they may have which your committee desires.

THEODORE JONES,
GEO. W. KINNEY,
GEORGE A. STUART,
WILLIAM HOWELL,
J. G. A. FISHER,
Committee of the Wholesalers of Earthenware and China.

Mr. GREEN. That is substantially the law now, is it not?

Mr. JONES. No. In Germany, for instance, there is an additional tax of 150 per cent above the home market value.

Mr. GREEN. That is what you might call there a special export price?

Mr. JONES. Yes; that is what they call it, but the importer is allowed to deduct that amount when paying his duties here.

Mr. GREEN. That is true, but they have in that respect to conform to the law.

Mr. JONES. They do.

Mr. GREEN. The law is on the home market price.

Mr. JONES. Yes, sir. In Germany they sell that with the 150 per cent additional.

Mr. GREEN. It is not the home market price, when that is added on, but they are conforming to the law——

Mr. JONES. That is what we suggest, that the Government shall get the highest rate, whatever it is. If it is the wholesale market price, pay on that, if that is the highest. If the export price is higher than that, assess the duties on that price.

W. E. WELLS, REPRESENTING THE UNITED STATES POTTERS' ASSOCIATION, NEWELL, W. VA.

Mr. WELLS. Mr. Chairman, there are a good many branches to the pottery industry, a good many commodities that come under that general name. The particular commodity of which I want to speak,

or the particular industry, is that of producing dishes upon which our food is served. It is largely competitive with the products of other countries. Dishes have always been imported from England, Holland, France, Germany, Austria, Italy, Japan, and China, and from some other countries.

The United States Potters' Association has always been represented down here when a tariff bill was under consideration by the Ways and Means Committee, because up until the time the war changed our competitive conditions the rate of tariff assessed upon competitive goods imported into this country was the most vital fact in our business. It was not, with the potters, a political question; it was strictly a business question; and with our working people it was not a political question either. It was simply a question of bread and butter.

Mr. Jones, who appeared a little while ago representing the importers and the wholesalers of china in this country, quoted some statistics, in which he called especial attention to the large increase in the American production during recent years and the considerable decrease in importation of competitive goods from abroad during the same period. I think his statistics were about correct, but the change that has happened in the last few years is something that perhaps is understood by the members of this committee. If not, it ought to be explained.

We had a rate of duty under the McKinley bill, under the Dingley bill, and under the Payne bill of 60 per cent on dishes, decorated, and 55 per cent on dishes, plain white. I don't know whether I need exhibit the class of goods about which I am talking, but I hold in my hand here four samples.

Mr. GREEN. I think the committee would be interested in seeing them. You may exhibit them.

Mr. OLDFIELD. What paragraph of the tariff are you talking to?

Mr. WELLS. Paragraphs 79 and 80.

Those are samples of dishes taken from my own household, and have been in use to a considerable extent.

Under the duties imposed by the three bills that I have mentioned the American pottery industry just about held its own. It could not actually grow or progress in proportion to the increasing population of the country or the increasing purchasing power of the country, indicating that the rates imposed either were by no means excessive or certainly not prohibitive.

In the years 1912, 1913, 1914, and 1915 the total production each year of the American potters making dishes was approximately $17,000,000. In 1912 it was almost exactly $17,000,000. In 1915 it was $17,654,000. During those same years the importations of directly competitive goods ranged from $10,000,000 to $11,400,000. But it must be remembered that the figures representing importations are the foreign values, while the figures representing American production that I have quoted represent the price that the wholesalers and retailers of the United States paid the American potters. To get at a true comparison to indicate what percentage of the business of this country is done by the importers and what percentage by the American producers, we must take into account the addition of the duty assessed on these importations, the addition of the expense

of bringing it here, plus the addition of whatever profit the importer charges. Our information is that the foreign value should be doubled, or perhaps a little more, but at a minimum, doubled, to represent a competitive value.

So that while the American potters during those four years were producing $17,000,000, paid to them by the wholesalers and retailers, the importer was enjoying a business of from $20,000,000 to $22,000,000. In fact, up until the beginning of the war, the American potter never had one-half of the business of this country.

The war had not progressed very long until importations from Germany and Austria, the countries that had given us the most concern, and the countries that had most largely exported to America, practically ceased importation into this country, or at least rapidly reduced until in 1917 and 1918 they were practically nothing. Now, those countries alone had sent to this country in the neighborhood of $6,000,000 foreign value during the year that we were producing $17,000,000. Doubling the foreign value to get the American competitive value, Germany and Austria were sending to this country something like $12,000,000 against the American production of $17,000,000, and if I am correctly informed, that competition was almost as troublesome to the importers in this country of French and English dishes as it was to the producer on this side.

At the same time production of these goods in France and England was a good bit curtailed by war conditions. They found somewhat the same difficulty that we did, or perhaps more difficulty than we did, in keeping the factories manned, in obtaining sufficient fuel, etc., so that the importation from those countries fell off quite materially. A famine in pottery came about in the United States. We, because we had no more factories then sufficient to produce all the dishes we could sell before the war, did not have factories enough to produce the dishes the people of this country needed when the war broke out. We could not make up the slack that resulted from the falling off of importations, and while my friend, Mr. Jones, spoke of the great reduction in importations of wares in which he deals, I think I am safe in saying that the importers have been able to sell in this country, from the beginning of the war until the present time, every dollar's worth of goods they could buy any place in the world, and that the rate of duty provided in the Underwood bill, which was a considerable reduction, especially on earthenware, from the rate provided in the Payne bill, had nothing whatever to do with the increase in the American business, and nothing whatever to do with the decrease in the imported business. It was entirely the result of conditions coming about through the war.

I think Mr. Jones quoted the importation for the year ended June 30, 1920. If he did not, they were $8,692,000. But for the first 10 months of 1920, the first 10 months of this past year, the importations were $9,613,000. For the corresponding 10 months of 1919 they were $5,790,000, or an increase between 1919 and 1920, of the first 10 months, of about 70 per cent, indicating that the potters abroad are getting to work, and are in position to more nearly supply the demand from this country.

Japan has been giving us a little more concern recently than any other country. In October, 1920, there were $463,000 worth Japa-

nese dishes brought to this country, foreign value. Not much less than $1,000,000 in one month from one country. If that rate should continue, Japan would bring to this country more than $10,000,000 per year in competitive value.

I just notice in a publication here entitled "Tariff Information, 1921," on page 258, where there are statistics on the rates of wages paid in Japan, that the potters receive 2 yen per day. That, I believe, is equivalent to about $1. Just before leaving home I took some statistics of wages in our own industry—I mean in the firm that I directly represent—for the two weeks ending December 18, 1920. We had in one of our five factories 304 men, women, and boys employed. They received for that two weeks $22,388, or it happens to be an average for the 304 people of $36.82 per week. Of the 304 people 103 were women, possibly one-third of them skilled, and two-thirds unskilled. There were 83 absolutely unskilled men and boys. There were 118 skilled men. I worked it out carefully to get averages, and I find the average wage was $4 per day for all the women; it was $5 per day for all the unskilled men and boys; and it was $9 per day for all the skilled men.

Now, we have, as against that, the Japanese wage for potters. Whether that means skilled potters only, or whether it means skilled and unskilled, and is an average, I have no means of knowing. But suppose it is an average. It is $1 against our average of $6 a day.

The question of dealing with potteries is very complex, for the reason that our competition comes from so many countries. Wage conditions and production cost are not uniform in all of those countries. They vary. They are cheaper in Germany, or at least they were before the war, much cheaper in Germany than in England, and cheaper in Japan by very much than in Germany. So a tariff high enough to protect us absolutely against the Japs would be practically prohibitive against that country in which there are the higher costs.

The potters, in coming before the Ways and Means Committee, have always been frank, and they have been frank simply because they had a good case. William McKinley was first sent to Congress from the district in which East Liverpool, Ohio, was located, the pottery center of this country. He took pottery protection as something of a text in his idea that American industry should be protected. I think that students of the tariff have ever since regarded the pottery industry as something almost an ideal example of a case where protection is fully warranted.

Mr. RAINEY. Do you regard this as an infant industry?

Mr. WELLS. Not at all.

Mr. RAINEY. It is the oldest industry in the world, is it not?

Mr. WELLS. It is not in this country. It is 50 years old in this country. The making of dishes, Mr. Rainey, is hundreds of years old in our competitive European countries. It is rather a slow industry to develop. There are so many difficulties about it. The reason that it is entitled to this protection is this: The percentage of labor cost to total cost is very high. You see, the raw materials used are not expensive raw materials. It is a little parallel to the case the gentleman just recited here in connection with optical glass. Take those small plates that I passed around there; we get for those

smaller plates, as our wholesale price, 12½ cents each. That is not a very high price. There is not one penny's worth of raw material in it. But last year, from figures that I just took off before I left home, our labor cost was 62½ per cent of our total cost. It was also a little bit more than 50 per cent of our selling price. As compared with other industries, I have a little clipping that I took from a Pittsburgh paper of January 4, which is perhaps interesting. The firm that I represent last year sold a little over $5,000,000 worth of goods, and they paid in wages and put in the pay envelopes just a little over two and a half million.

A report here by Mr. Gatchell, chief of the State bureau of statistics and information in Pennsylvania, makes this report for the county of Allegheny in which the city of Pittsburgh is located, in Pennsylvania, that in the year 1919 there were total wages paid in that county of $316,495,000, and the total value of the product, selling price of the product, $1,900,226,000. While the industries in Pittsburgh are largely iron and steel they are much diversified, and these figures, which I take to be official, indicate that the selling price was just exactly six times the amount of the wages paid. In our industry the selling price last year was not quite twice the amount of wages paid; that is, the material used in making pottery is so fragile that machinery can not be largely used in fabricating the goods. It must be the work of the human hand. Take that cup that I passed around there; that single cup had to pass through the hands of at least 35 individuals. That means not the mixing of the raw materials or the body of the clays, but the framing of that cup, the firing of it, the dipping of it, the decorating of it, and the packing of it. They don't come through in bulk; they come through one at a time. At least 35 people must handle that particular cup before it is packed and ready for shipment. And because of the fragile nature of the goods there is a large loss through breakage from one end of the plant to the other. In the factory that I represent we calculate that we are very fortunate if we get off with not less than 10,000 pieces broken and utterly destroyed every day, and with 50,000 additional pieces so damaged that they can not be sold at the full price. They are not entirely destroyed.

So the element of labor cost enters so largely into this that we have never had the nerve quite to ask the Ways and Means Committee for all the duty that was necessary to give us a reasonable share of the home market.

Mr. RAINEY. You are the only gentleman that has not, then.

Mr. WELLS. Well, I think we have been moderate. As long as the industry is so competitive as that the bulk of the business came from abroad prior to the war——

Mr. OLDFIELD (interposing). What was the importation last year?

Mr. WELLS. For the year ending June 30, 1920, the importations were $8,696,000.

Now, as to the competitive feature, when I appeared before the Underwood committee I was cross-questioned quite a little on this competitive feature, and finally the chairman called my questioners to order in this language (this was Chairman Underwood):

I will state, and I think I speak correctly the judgment of the committee, that the real issue is whether the present rate is competitive or not.

The present rate was the rate in the Payne bill.

And that is what the gentleman from Connecticut (referring to Mr. Hill) is trying to bring out from Mr. Wells. I think the witne s has clearly shown competition on a large percentage of the products involved in his industry, and that is the governing reason, from our standpoint, in fixing a revenue tariff, because without competition we could not have revenue.

Now, if conditions were to remain as they are to-day or, Mr. Chairman, as they have been for the past four years, we would not ask for anything other than the rate specified in the Underwood bill, because we have not been able in this country to make enough pottery nor to find enough pottery in the world to supply the demands of the United States. But we are just now at the transition period. We are getting nothing from our largest and most dangerous and most insidious competitor, Germany. But Germany is getting at work. Just to what extent I do not know. The factories that imported to this country from Austria are now located in central Slovakia, and they are getting to work. Just what the productive conditions over there are now we do not know, but we do know that in the month of October $125,000, foreign value, came to this country, which was more than came in the same month of last year. I think $69,000 came in October.

Mr. GREEN. That is correct—$68,000.

Mr. WELLS. Something like that. But remember that is the foreign price, and on top of that $125,000 there is an export added of $50,000, upon which no duty is charged. So what the final wholesale market value was of that $125,000 I have no means of guessing, but it shows that they are coming, too.

Mr. GARNER. I have heard that statement before—that the export duty from Germany was something like, I think, 150 per cent.

Mr. WELLS. Yes, sir.

Mr. GARNER. How did you understand that a manufacturer in Germany can compete with any other person in the world and pay 150 per cent export duty?

Mr. WELLS. I can only guess the reason is the very low rate of exchange to-day, the very low value of the German mark, which probably makes that possible.

Mr. GARNER. I was just thinking, if this Government was charging a duty of 150 per cent you could not even get to tidewater, could you?

Mr. WELLS. We could not.

Mr. GARNER. It is a wonder to me that the German Government at this time can charge these exporters 150 per cent duty and that then they can go out in the world and undertake to capture the market.

Mr. WELLS. I don't know how to explain it other than I said. I think it is probably due to the very low rate of exchange and the low market value to-day of the German mark.

Mr. GREEN. Has the price of china advanced in the last year?

Mr. WELLS. About 15 per cent in a year, I should say.

Mr. TREADWAY. How much in three years?

Mr. WELLS. One hundred and eleven per cent is what our records show in our factories.

Mr. TREADWAY. I think my records would confirm that—what I have had to pay.

Mr. GREEN. The reason I asked you that question was that one of of the importers who testified here said that the reason that the im-

ports from China and Japan in the 10 months ending October 20 had more than doubled was largely owing to the increase of price.

Mr. WELLS. Both the foreign and American prices have increased considerably in the last year.

Mr. GREEN. The imports were about two and one-half.

Mr. WELLS. That is right, within one year. I think that is from 1914 until now.

Mr. GREEN. You misunderstood me. I am speaking of the increase in value in Japan for the 10 months ending in October. There would be about a million and a half imported in 1919, the 10 months ending October, 1919, and $1,300,000 worth imported in the 10 months ending October, 1920.

Mr. WELLS. I have not, of course, undertaken to cover the entire ground, but there is just this I want to say, that we are having no demand now for our goods. We have had more cancellations in the last three months than we have taken new business. But the American potters were so far behind that we are still busily employing all our people on orders that have remained with us 6, 8, 10, and 12 months.

Mr. OLDFIELD. Are you reducing wages?

Mr. WELLS. We have not, and we, of course, can not as long as we are busy. There is not any manufacturer who would think of reducing wages until your factories are practically idle, and we are not foolish enough to even suggest it. Just what is going to happen in the future I can not tell. I know this, that the change is coming fast enough to indicate that we shall shortly need the restoration of the Payne rate, and I am satisfied that the Payne rates will not be sufficient to let us keep two-thirds of the American market. If we can have 66⅔ per cent of this business and rates sufficient to get us 66⅔ per cent of it and maintain it, we shall be perfectly happy.

The CHAIRMAN. What rates do you recommend?

Mr. WELLS. I make a recommendation that the Payne rate be restored, and until Germany and Austria get back into that market it will be sufficient to protect us at least against England and France. They have always been honorable competitors. We have divided up this market without quarreling.

Mr. HAWLEY. Will you have enough protection against Japan?

Mr. WELLS. No, sir.

The CHAIRMAN. What were the rates prior to the war?

Mr. WELLS. Fifty-five per cent when they were plain white and 60 per cent when they were decorated.

Mr. RAINEY. How did you divide up the market?

Mr. WELLS. In open competition. No other way. We have never got together and allotted the market, you understand.

Mr. TREADWAY. Mr. Underwood corroborated you in that, did he not?

Mr. WELLS. Yes, he did.

Mr. GARNER. Do I understand your position is that the tariff rate should be such that there could be competition between the American producer and the foreigner?

Mr. WELLS. I think so. We are willing to yield that point absolutely. There always has been. Prior to the war we always had a little less than half of this market. Of course we could not compete with importers, particularly from Germany and Austria. During

the war the country depended upon us and they needed us badly. The United States Government, during the war period, had a tremendous demand from its Army and its Navy and its hospitals for goods, and we had to give that business preference, and sidestep the most urgent demands that were coming from our customers.

The CHAIRMAN. Mr. Wells, a rate that would protect you enough to offset the difference between the cost of the goods in Germany and your cost here will not be sufficient protection as between you and China and Japan, will it?

Mr. WELLS. Absolutely not. But so long as Japan is no more active that it has been—it appears to be growing more and more of a competitor constantly, and I apprehend the time is coming when they will put us in a very serious situation in this country—a restoration of the rates under the Payne bill will afford us protection.

The CHAIRMAN. What you need is protection against the country from which the bulk of your competition comes, no matter what country?

Mr. WELLS. That is the idea, thank you.

Mr. TREADWAY. You would like to see something to equalize the depreciated exchange, would you not?

Mr. WELLS. That 150 per cent export tariff out of Germany is doing that pretty largely now, I should say, but there is such a small quantity coming from Germany—$125,000 a month from that country does not mean much.

Mr. RAINEY. Japanese money has not depreciated. How would you regulate that exchange proposition there?

Mr. WELLS. Well, I am making no question as to how the duty should be assessed, on what basis of exchange. I think Mr. Burgess wants to say something on that subject.

The CHAIRMAN. If we should change the method of valuing imports for the purpose of levying duty from the foreign value to the American value, that would overcome this difference in exchange?

Mr. WELLS. It would solve the problem, Mr. Chairman.

Mr. RAINEY. Would it solve it with Japan or any other country where the rate of exchange was the other way?

Mr. WELLS. I think so, wonderfully.

Mr. GARNER. How much does your company produce? What is the capacity?

Mr. WELLS. This year, 1920, we produced a little over five millions.

Mr. GARNER. Nearly one-third of the production in the United States?

Mr. WELLS. Oh, 1.0.

Mr. GARNER. I thought you said seventeen millions.

Mr. WELLS. Seventeen millions before the war, but we have increased production and increased prices. The actual production of the whole of the United States in 1920, as nearly as I could get at it, is between forty and forty-two millions.

Mr. GARNER. Then you produce about one-eighth of the consumption in this country?

Mr. WELLS. Yes, sir.

Mr. RAINEY. How do you go about it to increase your price?

Mr. WELLS. Whenever our labor cost, fuel cost, and material cost goes up, we estimate as closely as we can what additional selling price it is necessary to put on.

Mr. RAINEY. Each producer does about the same?

Mr. WELLS. In general, I would say that we are all familiar with each others' prices. There is no strict uniformity of prices.

Mr. RAINEY. How do you go about it?

Mr. WELLS. A man would be blind, deaf, and dumb, if he was the selling agent of any factory, if he did not know what price his competitor was getting.

Mr. RAINEY. Just so you find that out without violating the law.

Mr. WELLS. That is just exactly it. We have kept clear of violations of the Clayton Act, I think.

DAVID WALKER, REPRESENTING MORIMURA BROS., NEW YORK CITY.

Mr. WALKER. I represent importers of china. As an importer, I am perfectly satisfied with the tariff as it stands to-day. We can continue to do a little business. Inasmuch as this is a revision of the tariff, you may intend to revise china downward. I do not know. I would not want to interfere with it.

Mr. RAINEY. No danger of that.

Mr. WALKER. We are paying 55 per cent to-day on decorated porcelain as against 60 under the Payne-Aldrich law.

The CHAIRMAN. What are you paying to-day?

Mr. WALKER. Fifty-five per cent.

The CHAIRMAN. Under the Underwood law.

Mr. WALKER. Under this law as against 60 per cent under the Payne-Aldrich law. In other words, we had a 5 per cent reduction in the rate as between the Payne-Aldrich law and the present law.

Speaking of Japan, our importation of chinaware from Japan between the time that the present law was written, 1913, and the present time have been advanced in the market of Japan very materially. We got an advance in 1914. We got another advance in 1915. When it came to 1916 we looked forward to a long continuation of the war, and we used the year of 1916 as a base, and figured our advances for 1917, 1918, and 1919 upon the 1916 cost as a basis. Our importations of this year, looking forward now to the year 1920, our importations this year as against 1916 bear a relation of 2.65 as against the 1916 delivery of prices.

Mr. HAWLEY. Was that in quantity or price?

Mr. WALKER. In price. Our price to-day is twice, a little more than two and a half times, our price of 1916, which bore an advance then over the year that the present tariff was written.

Mr. GREEN. That is the price?

Mr. WALKER. Yes.

Mr. GREEN. The price in our currency?

Mr. WALKER. In any currency. What difference does it make?

The CHAIRMAN. What Mr. Green is trying to get at is what values those are based on, the depreciated mark or franc or——

Mr. WALKER. I am talking about Japan, where the currency is the yen, and it has not changed except to be appreciated. There is no depreciation of Japanese currency.

The CHAIRMAN. You are importing from Japan?

Mr. WALKER. Yes, sir.

Mr. GARNER. What with reference to the volume?

Mr. WALKER. In volume I would say our volume is approximately the same. I do not think our volume has increased very much.

Mr. GARNER. When you consider the advance in price, although your rate of duty—if I understand, the ad valorem duty now is 55 per cent?

Mr. WALKER. Yes, sir.

Mr. GARNER. Although your rate of duty is increased to 110 per cent, as compared with 55 per cent, your volume is the same?

Mr. WALKER. Pretty nearly the same. I am not qualified to speak exactly.

There are a few facts that enter into the cost of Japanese merchandise that are interesting. One is the fact that packing to-day costs on a set or a case of china 46 sen, or 23 cents. Roughly speaking, a yen is 50 cents. So you know pretty nearly the correct valuation in exchange.

The CHAIRMAN. You are an importer, not a manufacturer?

Mr. WALKER. Not a manufacturer. As I said at the start, this is a reversal of form. You have got the negative on first. I do not know what your intentions are in respect to the tariff. I would rather come behind the other people who are probably wanting to change the rate.

Mr. RAINEY. We are not going to lower it any.

Mr. WALKER. Not going to?

Mr. RAINEY. No.

The CHAIRMAN. I am glad to hear you say that. I was afraid you would be in favor of lowering it.

Mr. WALKER. The cost of packing to-day in Japan has gone up to 46 sen or 23 cents a cubic foot, which means, if you take 100 pieces to the set, on a set of 100 pieces that cost, figuring 15 cubic feet to a case and three sets in a case, that gives you 5 cubic feet for a set, or, in other words, 2 yen 30, or $1.15 a cubic foot for a set of dishes, which is about 8 per cent of the value in addition to your 55 per cent that also becomes a part of the duty.

Mr. GREEN. Importations from Japan have greatly increased within the last year, have they not?

Mr. WALKER. In what line?

Mr. GREEN. What you are talking about?

Mr. WALKER. In china?

Mr. GREEN. In china; yes.

Mr. WALKER. Not so much in our line, not to such a great extent in volume.

Mr. GREEN. Well, according to our reports they are almost double.

Mr. WALKER. You have got an advance in price there to take care of, Mr. Congressman.

Mr. HULL. We are talking about quantity.

Mr. WALKER. I am talking about quantity. I am saying they cost about three times what they did before the war, in Japan.

Mr. GARNER. In other words, the cost of the chinaware in Japan is about three times what it was in 1916.

Mr. WALKER. No, sir; 2.65 what it was in 1916, twice as much as it was in 1916, a little over two and a half times what it was in 1916.

Mr. GARNER. And this duty is double what it was in 1916, yet the volume remains about the same?

Mr. WALKER. Pretty nearly the same. There is an ocean freight rate of 85 cents a hundred pounds, which is practically 5 per cent of the value. There is a transcontinental freight of $2.70, which is 60 per cent ad valorem figured upon the value of a set of dishes. I do not see any reason why under the present conditions that the merchandise which I am particularly interested in—I am speaking for myself—the merchandise can scarcely be said to be in direct competition with the domestic manufacturer. There are one or two thoughts I may speak of later if the occasion arises. I would like to submit a brief afterwards in connection with some of the data I have not with me to-day on importation.

UNGLAZED MAGNESIA PORCELAIN.

[Suggested paragraph.]

HOUSE OF REPRESENTATIVES,
Washington, January 11, 1921.

GENTLEMEN: I am handing you herewith two letters that I have received from the Louthan Manufacturing Co., of East Liverpool, Ohio, they being engaged in the business of producing unglazed magnesia porcelain.

The above referred to company claims that in order to continue in business it will be necessary for them to have a 65 per cent duty placed on imported goods of unglazed magnesia porcelain, and I particularly call your attention to page 2 of letter dated December 28, and the photographic picture attached thereto.

FRANK MURPHY.

EAST LIVERPOOL, OHIO, *December 28, 1920.*

DEAR MR. MURPHY: Yours of the 23d is received and I want to be brief and straight to the point and facts.

First, it is impossible for me to appear before the Ways and Means Committee, but do not get glazed or unglazed electric porcelain or crockery confused with *unglazed magnesia porcelain*, in which I am deeply interested. There is not such an article as glazed magnesia porcelain, and never will be, as our line must be and is almost as flexible as rubber. Must have the proper expansion and contraction, otherwise will disintegrate in lighting the fire and likewise in turning it off.

We are the pioneers in this line of magnesia porcelain and originated it in this country, starting in 1912 and had it not been for the war taking the place of a protective tariff, the Wilson bill would have made it impossible to continue the business.

Since then, there have five other concerns started in the same line which is all right, as we do not complain of home competition. It in itself will protect the price to consumers, but the industry can not succeed, without at least a 65 per cent duty on imported goods of unglazed magnesia porcelain, consisting chiefly of the following:

Underglazed magnesia backwalls and radiants, magnesia unglazed gas mantle and burner tips.

Inclosed I hand you photo [not printed] showing the magnesia porcelain backwall and the upright radiants, and with not less than a 65 per cent specific duty this new industry can not succeed, otherwise it will have to give way to imported magnesia backwalls and radiants and magnesia gas mantle rings, burner tips, and as stated five other concerns having started in this new line of magnesia unglazed porcelain, we can all succeed and home competition will regulate the price to the consumers. However, none of us can succeed unless we have at least 65 per cent specific duty on imported unglazed magnesia porcelain, and would just say that our backwalls and radiant fires conserve the gas fire—either the natural or manufactured—about one-half over the old method of heating and also one-half price to consumers of gas.

Do not, as I have said, get electric porcelain or pottery ware confused with magnesia unglazed porcelain, as they are totally and emphatically a different proposition.

B. M. LOUTHAN, *President.*

EAST LIVERPOOL, OHIO, *December 21, 1920.*

DEAR MURPHY: Not that we want any appointments, neither do any of our 200 employees, but certainly do want you to do everything you can to get us not less than a 65 per cent specific duty on magnesia porcelain backwalls and radiants for our radiant fires and inverted gas-mantle rings, magnesia burner tips, all unglazed.

Do not get the above confused with electric porcelain. The above is a new industry in this country, five other concerns starting home competition will regulate the home worker, but to have Europe on top of the industry, can not succeed.

We are the pioneers in unglazed magnesia porcelain and had not the war taken the place of the Wilson tariff bill we could never have continued the business.

Listen: All unglazed magnesia porcelain not less than 65 per cent, if in your power. I wrote you some time since, but thought I would renew your memory.

I have a very nice letter from Senator Willis, stating he will not overlook our special industry.

B. M. LOUTHAN, *President.*

BRIEF OF THE COORS PORCELAIN CO., GOLDEN, COLO.

To identify this company: It was until November 15, 1920, the Herold China & Pottery Co., and the writer, H. F. Coors, appeared before your committee in behalf of the chemical and scientific porcelain manufacture at the time of the hearings on H. R. 7785.

My object in writing you at this busy time is to request that, if possible, my testimony as given during the hearings on H. R. 7785 be considered in framing the general tariff bill.

Regarding any new facts, conditions are essentially the same, with one important exception, namely, visible proof of the importation of Royal Berlin porcelain, as per copy of a letter we inclose herewith, which is irrefutable evidence that Royal Berlin porcelain can be and is being imported.

Your favorable consideration of this request means very much to the future of this essential industry.

The HEROLD CHINA & POTTERY CO.,
Golden, Colo.

MY DEAR MR. COORS: As you have been advised, we have been experiencing a great deal of difficulty in securing shipments of your porcelain ware. At present not one case against the following invoices has been received:

No. 5583	$818.01	No. 5365	$10.50
No. 6371	29.70	No. 5095	18.75
No. 5365	23.80	No. 5583	159.30
No. 6483	381.35	No. 5366	5.20
No. 5445	283.20	No. 6894	36.53
No. 5366	18.50	No. 6483	930.08
No. 5564	112.20	No. 6193	588.06
No. 6194	463.32	No. 5445	9.90
No. 6334	15.74	No. 7058	781.11
No. 6861	8.20	No. 6194	534.60
No. 6193	578.48	No. 6483	887.96

The June shipment is not overdue under present conditions. However, we shall greatly appreciate it if you will use your very best efforts toward securing delivery of the April and May consignments. We fully appreciate that this delay is to be attributable entirely to the carrier, but the fact remains that we can get quicker shipments from abroad. We have not ordered any new Royal Berlin ware and shall not list it in our new catalog, which we are now preparing. However, we authorized shipment of the Royal Berlin goods which were paid for by us in 1915 and these were received by us in a remarkably short time. The final result, should this condition continue very much longer, is obvious, and we believe that you ought to get in touch with your representatives in Washington and put the proposition up to them in the light of protecting the home industry by making the railroads give better service. Possibly a proper explanation to the transportation company responsible for the delay may have its effect in making them a little more keen about moving the goods.

CARBON.

[Paragraphs 81 and 82.]

A. C. MORRISON, REPRESENTING THE CARBON SECTION, ASSOCIATED MANUFACTURERS OF ELECTRICAL SUPPLIES, NEW YORK CITY.

Mr. MORRISON. Before I speak upon the carbon industry, I wish to call the attention of the committee to the fact that you have in your circular asked for evidence of undervaluation. The industry has endeavored as far as possible to comply with your circular, and yet while we are aware that there is undervaluation, there is great difficulty in obtaining information, and I think that all American manufacturers are confronted with the same difficulty. For that reason, I desire to make a constructive suggestion regarding it in the new tariff bill.

You are aware that most of the customs offices are at the ports and are constantly accessible to the importers. The importer has access not only to his own importations but can secure information as to other imports.

If we have to wait for the Government statistics as to importations in any commodity, we will discover that it is from three to five or six months after the importation before we are able to learn what the facts are. While at that time we might be entirely convinced that there is undervaluation, we have no means of proving it.

There is a rule of the customhouse—whether it is a law, or a rule, I can not say—but the American manufacturer has little standing in the customhouse. The collector refuses to give the American manufacturer information concerning the imports of any commodity, because the facts are said to be secret and private to the importer himself. I concur in that to a reasonable extent. I do not deny that the importer has the exclusive right to know his own invoice price, but I do wish to say to the committee that when an article has been evaluated in the customhouse, then it becomes public business. If the American manufacturer desires to see that the Government gets its revenue and that he gets the protection which Congress has granted him, I think there should be some provision in the law which will make it possible for him to see a sample of the import and see the value that has been placed upon it.

The customhouse official can not possess all knowledge. He is not an encyclopedia. The importer knows his business and the customhouse, which is the Government, knows less about the value of the imports than the importer does. The importer has a decided advantage.

Now, as a matter of fact, owing to these rules which have been established, the American manufacturer can not get the help of the Government and can not help himself.

I want to make the broad statement that I believe the revenue could be increased $30,000,000 a year by a change in the rules so that the American manufacturer will have the right to aid the Government and aid himself by giving information to the customhouse and have these matters made right. I think, with a custom revenue of $300,000,000 a year, that the revenue could easily be increased 10 per cent by this change in the law.

That is all I have to say on that.

The carbon industry uses petroleum, coke, coal, pitch, tar, dead oil, and metals. All of these are raw materials, and all are low in cost.

The industry takes these materials running from 1, 2, 3, and 4 cents per pound, and first analyzes them with great care to assure purity. And, it is a very delicate analysis.

These materials selected with great care, are so mixed and manipulated that they become plastic and can be molded and shaped into various forms. They are then individually placed in regulated furnaces and baked from two to five weeks under carefully controlled conditions. The carbon manufacturer has to take the risk of the slightest deformation of breakage.

These forms come out of the furnace in approximately the shapes that you see here [indicating forms on table]. They are then finished with extreme accuracy and with great care. Variations of as little as a thousandth of an inch must be guarded against. They must fit the metal parts of machinery for which they are designed. They must fit close.

There is a very strong parallel between the carbon industry and the pottery industry, with this difference: The carbon man does not have to deal with the kitchen mechanic, but with the expert electrician and adjust himself to all the intricate mechanism of American industry. He must make many sizes and dimensions. For one branch of the industry alone, and that is the brush branch, there are 8,000 different types, counting mixtures and dimensions. It is an individual product and an infinitely detailed business. Therefore it employs a large amount of labor. We take raw material that is worth a few cents a pound and change that raw material into the finished product that is worth anywhere from 6 cents to $50 a pound, according to the amount of labor that is put into it.

Now, what are these carbon products used for? Here are carbons for electric arc lights, the carbons which you see on the street. A few years ago all of the cities used them, and there were then produced more than 200,000,000 of these particular carbons annually. A few cities still use them. But there is constant change and evolution in this industry and constant improvement. The carbon arc is in competition with all the other means of electric illumination. There can never be any monopoly in it. Of this particular line of carbons at one time the industry made 200,000,000 a year, but last year it made only 2,000,000. There is, therefore, constant change; things become obsolete or are greatly modified.

This is a moving-picture carbon, a very important branch of the industry, and it is growing. And that [indicating] is a wonderful high intensity searchlight carbon. It was developed during the war and is the most efficient searchlight carbon that has yet been produced. It was used by the navies of the Americans and the Allies during the war, and it has enabled them to make a target of a ship at 10 miles. The best they could do before was 5 miles. The development of that carbon was the direct result of the knowledge of the carbon industry in this country. The Battle of Jutland was nearly lost because the searchlights of the enemy could pick up the English ships at some distances at which the English could not see the Germans at all. So I merely point these facts out to show that the knowledge of how to do such things should be kept here.

Now, in the larger electric field this industry makes the great electrodes, weighing as much as a ton each. These electrodes are vital to the existence of electric furnaces and electrochemical purposes. The electrical industry in this country depends on these electrodes. This country in turn depends upon the electric furnace industry for its place in many important fields of commerce. Certainly no modern war can be conducted without this industry. Before the war England and the Allies depended upon Norway, and especially Germany and Austria, for their supply of electrodes. America came to the rescue and prevented a serious situation by its exports, which have, of course, now ceased, except for certain graphitized electrodes.

In another field this little brush [indicating] varies in size from that [indicating] to the largest one which is used in this country. There are millions of those brushes used to transmit electrical energy from the dynamo to the wire and the wire to the motor, and there are 8,000 different sizes and measurements. They are a vital part of every electric dynamo, and without them electric power would cease, these lights would go out, no cars would run, and all electrical mechanisms in the industry would be silent. They are designed to a highly technical degree. The constituent materials must be so combined as to exactly carry the current. This industry seems so subdivided that it would appear subject to less competition because every electrical invention requires a different brush. As a mater of fact, very soon brushes become standardized in certain fields and the minute they are standardized and the definite composition is learned by the foreigners, they rush into the manufacture of these large requirements and take the business away from this country.

The next field is miscellaneous carbon products. Congress in the past has placed these articles in a sort of basket clause. Yet here is that type of products that is more technical and more intricate than even these other carbons.

This ring here you see [indicating] is a steam turbine packing ring. The steam turbine is being rapidly developed and this ring is necessary. It will hold the steam and it is the only thing which possesses other needed qualities. There was no substitute for these rings in our Navy during the war. The Navy and the shipping of the world is depending more and more on turbines, and it is of the greatest importance that we should have these rings manufactured here. They should be protected and should be protected on the basis that this is a very highly developed product. Yet this and a multitude of other articles have been given low duties, as if unimportant. There also are found all those carbon parts without which the telephone could not be operated, some of which are worth $6 per pound.

Here is a globular material that is so fine and so delicate that it is a little beyond three one-hundredths of an inch in diameter. That is used in the telephone for the deaf, but people using these delicate telephones every day know nothing of the fact that these little balls are each hollow and are worth $50 a pound.

The CHAIRMAN. Are you including in your brief remarks as to rates?

Mr. MORRISON. Yes, sir. Now, having described the industry, I wish to call the attention of the committee to what has happened. I

just want you to know what Congress tried to do for this industry and what the courts have done to the paragraphs prepared by Congress.

Under the tariff act of 1894, paragraph 86, carbons were assessed as "earthen or mineral substances—if decorated, 40 per cent; not decorated, 30 per cent." They were classed along with mineral substances and pottery.

The custom officer assessed them at that, but the courts overruled his decision and said no, they are not susceptible of decoration, you can not paint them. Therefore, they should come in under a 20 per cent tariff, as articles manufactured in whole or in part and not provided for.

Under the tariff act of 1897, paragraph 97, Congress added to the words "earthen or mineral substances" the words "or carbon," and left in the words "if not decorated in any manner, 35 per cent ad valorem; if decorated, 40 per cent." This was contested by the importers and carried through the courts, and the courts decided that Congress did not mean anything when it added the words "or carbon." The court decided that as carbon was not susceptible of decoration, the words "or carbon" added by Congress had no meaning whatever, and carbon articles should still be 20 per cent ad valorem as "nonenumerated manufactured articles."

Under the tariff act of 1897, paragraph 98, Congress provided for carbons for electric lighting, 90 cents per hundred. Those carbons were being brought in in 12-inch lengths when that law was enacted. Those were the carbons that I was talking about. What happened to that? That rate was 90 cents per hundred and they were then coming in 12-inch lengths. What did the importers do? They brought them in in 48-inch lengths. They could have brought them in mile lengths if they had wanted to. That is what happened and the Supreme Court of the United States sustained the ruling of the customs authorities that they were entitled to do that. The Government lost its revenue and the industry its protection.

Then came the tariff of 1909 and the carbon industry called attention to the facts that bringing in these extra lengths was defeating the purpose of the act. Then the importers set up the cry that we were coming down here and demanding an increased protection for carbon of 400 per cent. Why? Because we sought to make them cut the carbon to 12-inch lengths instead of making them in 48-inch lengths and defeating the clear intent of Congress.

Now, with regard to the brushes which I have described, the words "chief value carbon" were added. Now, Congress intended these carbon brushes, the brushes developed by the carbon industry containing metals in finely divided form, should be classed as carbon products, but the words "chief value carbon" were added by some means and this permitted the importation of those brushes and carbon plates at 20 per cent ad valorem, as manufactures of metal. We do not know how many are being brought in, but we know that there have been millions of them brought in. The plates from which the brushes are cut have no foreign wholesale value as they are properly sized to waste no material, hence there is every possibility of undervaluation.

Now the tariff of 1913 cut petroleum coke carbons down to 15 cents per 100 feet. That industry was dead anyhow, so nobody cared.

Then, after carbons, they left the words "chief value lampblack, 40 cents per 100 feet." Congress then added these words: "Carbon for flaming arc lamps not specially provided for, 30 per cent ad valorem." There had been wonderful developments in the industry and increased efficiency in the lamps. These developments made a new method of photography possible, and the use of flaming arcs promised to grow greatly. Congress, however, added after "flaming arc lamps" the words "not specially provided for," 30 per cent ad valorem. I think the carbon industry believed that Congress intended what it said and that carbons for flaming arc lamps should be dutiable at 30 per cent, a very low duty, but at the same time something. Now, what happened to that? The importers contended that the words "not specially provided for" governed, and they were specially provided for by the words "chief value lampblack, at 40 cents per 100 feet." The courts sustained them.

Mr. LONGWORTH. That was not what Congress meant?

Mr. MORRISON. No; absolutely not. It was shown what they were to be used for and that when they came in they should pay 30 per cent, but the courts held that carbons for flaming arc lamps were of chief value as lamp black; that is, as basic material and, therefore, they were assessed at 40 cents per hundred feet.

Different grades for superb searchlight carbons came in at one-half a cent a foot. I have some of them. That carbon [indicating] is the wonderful searchlight carbon of which I am speaking. That carbon arc will absorb 10 horsepower of energy in a half-inch space. It has doubled the efficiency of the searchlight of the navies of the world. It will develop 30,000,000 candlepower, and, with the proper reflector, enable you to pick up a ship at 10 miles and make a target of it. It has been used for signaling by reflection on the clouds for 124 miles. That is a marvelous thing. That carbon, due to the interpretation of the courts, comes in at 1 per cent ad valorem.

Mr. HAWLEY. It comes in for 1 per cent ad valorem. That is the decision of the court that it come in for 40 cents per hundred feet instead of 30 per cent ad valorem?

Mr. MORRISON. The decision of the court is that it come in at 40 cents per 100 feet and it is about 3½ feet long. All it pays under the decision is 1½ cents and it is worth $1.25. Now, I have given you, very briefly——

Mr. GARNER (interposing). May I interrupt you with a question right there? You do not mean to say, in your argument, if I understood you, that the Supreme Court is doing other than what the statute authorizes them to do—construing the meaning of the statute.

Mr. MORRISON. I am not blaming the courts. I say that the statute is not properly drawn.

Mr. GARNER. You remarked in the beginning what the courts had done to Congress, and I was just wondering if they had done anything to Congress or whether they had done their duty as to Congress.

Mr. MORRISON. Well, I would like to say that when Congress wrote in "flaming arc-light carbons, 30 per cent ad valorem," it was, on the face of it, the intent of Congress to collect 30 per cent.

Mr. GARNER. Well, you go to the court to get them to construe a statute; they construe the statute in the most logical way. I am unwilling to acquiesce in the statement that the Supreme Court con-

strued the statute in the way the lawmakers did not intend it should be construed.

Mr. LONGWORTH. I think that that has often been done. They probably do not intend to do it, but they do it.

Mr. GARNER. I think when there is no conflict at all it is the fault of the men who draw the law, because, of course, when they undertake to interpret the statute they have in mind the lawmaker's idea, and when the courts are undertaking to construe a statute they always have in mind the lawmakers' intent in writing that statute.

Mr. LONGWORTH. But they do not always construe it as the lawmakers intend when they write the statute.

Mr. GREEN. I think that possibly a great many people imagine they have a statute on the books and that the statute is just what they think it is. Just look at the common law, and look at the statute of fraud. The statute of fraud is one of the plainest things that possibly could be written, yet this room would hardly contain the books which have been written upon the statute of fraud to try to make it clear.

The CHAIRMAN. Mr. Morrison, I can give an illustration showing the burden on the court and a decision which was made on linoleum. Linoleum was brought in in yard widths and multiples of yard widths—3, 6, 9, 12, 15 feet, and so on. And the language in the law provided for linoleum which was less than 12 feet in length. So a New York importer—at that time we were importing a great deal of our linoleums from Japan, and one of the importers arranged in that country to have linoleum made in Japan 11 feet 11¾ inches in width, and brought it in, and demanded that it be permitted to pay the rates for linoleum under 12 feet. The collector of customs said that this was in every sense of the word the same as 12-foot linoleum and made them pay the higher rate. They went into the courts, and the courts of law rendered a decision that it was under 12 feet in length, and the court decided that the linoleum took the lower rate.

Mr. GARNER. Was the court to blame?

The CHAIRMAN. This is the same case. Without reflection upon the court, they were justified in making that decision. The difficulty was with the gentlemen who made the law, and the gentleman from Texas [Mr. Garner] helped to make that law.

Mr. MORRISON. That emphasizes the point I wish to make, that at the time when we are arriving at what we believe is the proper paragraph, that this subject is of such great importance to such a large industry that I think that great care should be taken, and it should be given due consideration, and it should so correct the law that it will stand the test. I feel that Congress wishes to get the revenue which will result, and the industry wishes to be protected. These measures are so important that they should be studied so far as possible, with the intent of so writing a law which would stand beyond question.

Mr. RAINEY. If we should examine the record in this case, we would probably find that the industry suggested the complete language which you are now complaining of, that the industry itself suggested it.

Mr. MORRISON. You will find, sir, I think, that quite the contrary is the case. I want to name one more illustration——

Mr. RAINEY. I will look it up and see.

Mr. MORRISON. Here is a carbon plate in which is incorporated finely powdered copper. It is a highly finished product out of which brushes are made. It looks like copper, and I am informed and believe it has been brought into this country as braziers copper plates at 5 per cent ad valorem on a 25-cent per pound valuation, instead of 20 per cent on a dollar a pound valuation, or 1 cent duty per pound, instead of 25 cents per pound.

Mr. HAWLEY. What is it?

Mr. MORRISON. It is a mixture of carbon and copper in a certain proportion to meet certain requirements of the electrician. It is so much like copper that an ordinary customs officer would pass it as a copper plate.

Mr. YOUNG. What are the proportions?

Mr. MORRISON. Why, I presume in that particular case it is 80 per cent copper. They run from 1 per cent copper to 90. But this powdered copper used is a sort of bronze powder and now dutiable at 25 per cent ad valorem. If it were shiny and bright enough like this [indicating] when it came in, it would probably be classed as brazier copper and pay 5 per cent ad valorem under the law. I am merely using these as illustrations——

Mr. OLDFIELD. How would you remedy this? This is more than 80 per cent copper, and it looks like copper.

Mr. MORRISON. We can't make any wording that would provide protection against deliberate fraud, but we can make wording which will include that thing and make it a fraud to bring it in otherwise.

Mr. HAWLEY. Is there any particular kind of protection; have you any technical names which you can use to describe it?

Mr. MORRISON. It should be and can be included in the carbon paragraph and be protected.

I wish to say, also, that the manufacturers abroad have been manufacturing these, especially for the American trade, and these plates have no wholesale value in the country in which they are manufactured, and therefore there is great opportunity for undervaluation. That is what I meant when I said there was undervaluation, but there is absolutely no way now for the domestic manufacturer proving it or even helping the Government.

I trust that some of the members of this committee will be interested in this particular subject, and I trust that when the paragraph is written to cover the carbon industry that they will give it very careful consideration. I suggest that when the new paragraph is made that it be divided into its natural divisions of light, heat, power, and miscellaneous.

The first of these divisions, "light," would include all the carbons for arc lights that I have spoken of, and includes, of course, all the moving-picture carbons. And on this point I want to say that prior to the World War importations from abroad were 17,000,000 moving-picture carbons per annum, and that was about the consumption. I do not think that over a million were made in this country. And they were only paying 6 per cent ad valorem because of the court decision and the low specific duty. So all of this quantity which I have been talking about came in. The importations before the war were 17,000,000. They came from Germany. The war prohibited them from coming. The American industry met the requirements of the country, and is at present doing so. We are only enabled to

do this as the result of the war. After the war market changes came about, and the American industry will go out of business again if the present rate of importation continues.

The consumption of these carbons has increased until about 20,000,000 are now used in this country. They have been highly developed, so as to stop the flicker, and will do all of those things which the moving-picture people have been requesting and recommending.

In October, 1920, however, 1,100,000 came in from Germany. I have a cablegram this morning quoting an order that was placed last week in Germany for $1,000,000 value of these German carbons. That means, if filled this year, a very large proportion of the business.

Mr. GARNER. Do they come in direct?

Mr. MORRISON. I do not know how they come in. I have had them in my hands, marked "made in Germany." So there is no question about where they are made. They are taking the American market.

Mr. GARNER. How can you get evidence showing this committee just how the importations are made from Germany? Some of the witnesses say they come from Holland. Where can we get information showing how these importations are reaching this country from Germany?

Mr. MORRISON. I think it is a very simple matter. This committee can simply ask the Treasury Department for that information and obtain it.

Mr. GARNER. The Treasury Department has that information?

Mr. MORRISON. Certainly. If you wish tariff information, you can get it that way.

Mr. GREEN. What kind of carbons do we export?

Mr. MORRISON. We exported during the war a number, but we are exporting now but comparatively little.

Mr. GREEN. You do not hardly mean that?

Mr. MORRISON. Yes; I do.

Mr. GREEN. Well, we exported some as late as last October.

Mr. MORRISON. We have exported some to Canada.

Mr. GREEN. Canada is a large exporter. We have exported——

Mr. MORRISON. This year?

Mr. GREEN. Yes.

Mr. MORRISON. I received two cablegrams yesterday and a long letter this morning which has hardly yet been decoded, but during the past four months I have been accumulating all the information I could get with regard to all labor costs, and especially in the carbon industry abroad. I have also accumulated information regarding the labor costs here and abroad from six principal countries as to the different trades and the skilled and unskilled workers.

I have here information with regard to the labor costs for the last 10 years all figured out on a dollars and cents basis, and the basis of exchange at the time the labor was done and the work paid for, so that it is accurate for that time.

There are many cases in which it is difficult to get this information from the foreigners; nevertheless, if it will be of interest to the committee, I will get the information drawn up for it. I think it will be very helpful.

Now, I will speak of the specific labor costs here and abroad, the wages here and abroad in the carbon industry. In the United States I got an average of over 4,000 employees manufacturing carbon products. That includes foremen and those people who devote their whole time to the manufacture of the product, and I find that we pay an average of 66 cents per hour, $5.28 per 8-hour day, over $31 per week. Again, in order to check that information and to see whether that information was substantially correct for the whole industry, I took New York State, the average of all factory workers for November, 1920, and found that to be $28 per week. In the carbon industry it is $31 per week; it is a little higher in the carbon industry because of the large proportion of skilled labor.

Mr. GREEN. I have those figures. This says that there was exported for the 10 months ended October $1,225,000, and that in October the value of the exports was $137,716, somewhat in excess of October, 1919.

Mr. MORRISON. Those are goods which our people send over there to Canada and are sent over for use by American branch plants, especially electrodes for dry cells, and includes special graphitized electrodes——

Mr. BACHARACH (interposing). I would like to hear some more about the wage scale abroad.

Mr. MORRISON. I will be glad to give that. I find that on December 15 the German workmen in the carbon industry was getting 65 cents a day, exchange considered. They were getting 50 marks, the average employee. They employ a great many women. These workers receive $3.90 per week, on an average, against our $31 per week.

I have got the English rates also.

The CHAIRMAN. That is what we desire, and we want it on a gold basis.

Mr. MORRISON. I have got it on a gold basis. I have got the English rate at $2 per day and $12 per week. Now, for your information, if I had the time, I could go into detail and tell you what I have got here. We have taken the reports of the Department of Labor for American labor for the past 10 years. I have the reports as to the labor in Germany, France, Japan, Austria, England, and Canada, and I have all of those rates of exchange considered both in marks, yen, or whatever it may be, and then figured out in dollars and cents, and then I begin with blacksmiths, building labor, carpenters, painters, plasterers, machinists, and all of the different classifications of labor, and I have here a tabulated statement setting that out.

Mr. BACHARACH. What is the information you have about Japan?

Mr. MORRISON. Curious enough, wages in Japan for skilled labor are a little bit higher than they are in Germany. I think that is a most astounding thing.

Mr. BACHARACH. Are any of these products patented?

Mr. MORRISON. None of them are patented in this country, in this field. I presume that some particular things are, but no patents have been issued protecting these things.

Mr. BACHARACH. Are searchlight carbons made abroad?

Mr. MORRISON. They originated in Germany and the man that made the lamp was in England three days before the war broke

out. He was captured and interned and the specifications, including the searchlight carbons, were taken away from him. The English could not make those searchlight carbons. The American industry worked out the process and the American industry make them for the navies of the country and the Allies.

Mr. LONGWORTH. What information have you with regard to the labor situation in Germany, whether the labor is contented, or whether they are having trouble and strikes and things of that sort?

Mr. MORRISON. I have the information that there is a large excess of idle labor and because of that they are keeping wages down. This is a report from Germany at the end of December. The wages then were in the great cities 50 marks, equaling 65 cents per day, women 26 marks. That is 39 cents per day.

Mr. LONGWORTH. This is in a carbon plant?

Mr. MORRISON. This is a carbon plant. These figures apply generally, but they are lower in the smaller cities. Ten per cent of the men engaged in this industry were lost during the war. The plant is working a full force and they have not noticed any difference in their present efficiency as compared with before the war.

In other words the Bolsheviki trouble was incidental and the men are working well now. I find the coal situation is complained of. They complain bitterly of the coal shortage and of the coal prices. But they are paying only $3.37 a ton, exchange considered, and we are paying $6.

Mr. LONGWORTH. That is what their prices are?

Mr. MORRISON. Yes, sir.

Mr. LONGWORTH. Is that figured in our money?

Mr. MORRISON. Two hundred and fifty marks per ton, or $3.37 our money on December exchange. The price for coal has been set at 250 marks. In other words, I can take $3.37 and convert it into marks there and buy a ton of coal in Germany.

Mr. GREEN. By way of explanation as to the coal matter, I might say that Germany has recently been developing methods for the use of brown coal deposits, and it is not unlikely that this may be the coal that they are using now.

Mr. MORRISON. I can not answer that, although I know that the man that gave this information is a man that is quite familiar with coal, and I think it is not improbable that had they been using brown coal he would have stated so. They have maintained the price of coal, they have fixed it, I believe, at 250 marks per ton.

Mr. LONGWORTH. The information that you get then is that the bolshevik movement has almost stopped?

Mr. MORRISON. That is the information that came to me, and gives information the last of December.

The CHAIRMAN. Mr. Morrison, will you file with us all that information as to foreign wages compared with our wages, and the wages in the foreign manufacturing plants as compared with our plants? That is very valuable information, and is just what the committee has been looking for.

Mr. MORRISON. I thank you, exceedingly.

The CHAIRMAN. Also file a schedule of the suggested rates of duty on these articles, if you please.

Mr. MORRISON. Mr. Chairman, I would be glad to do that. May I also file a brief suggesting the change in wording which might be used in this matter?

The CHAIRMAN. We will be glad to have you do that.

BRIEF OF THE CARBON SECTION OF THE ASSOCIATED MANUFACTURERS OF ELECTRICAL SUPPLIES, NEW YORK CITY.

TARIFF HISTORY.

The history of carbon in connection with the tariff has been disastrous. In 1897 the word "carbon" was added to the pottery paragraph, wherein occurred the words "if decorated, 35 per cent, if not decorated, 30 per cent." There had been a dispute as to where carbon should be placed, and the word "carbon" was evidently put in so that carbon should take a 30 per cent duty. However, the courts decided that as carbon was not susceptible of decoration, the word in the paragraph meant nothing, and it must come in as a nonenumerated manufactured article at 20 per cent ad valorem. In the tariff of 1897, paragraph 98, carbons for electric lighting were granted a tariff of 90 cents per hundred. The standard carbon of that day was about 1 foot in length, but immediately importers brought them in 3 and 4 feet in length, cutting in this country, and paying 90 cents per hundred pieces, so that the duty was reduced to one-fourth or one-third of what Congress intended.

Later, in 1913, when the flaming arc carbon had been developed, Congress provided for it in paragraph 82, with the following words: "Carbons for flaming arc lamps, not specially provided for in this section, 30 per cent ad valorem." The importers immediately took advantage of the words "not specially provided for in this section" and claimed that certain flaming arc carbons were of chief value lampblack and dutiable at 40 cents per 100 feet. This contention was sustained by the Court of Customs Appeals, and the protection of 30 per cent ad valorem, which it had evidently been the intention of Congress to give to the flaming arc carbon industry, was denied except in the case of one now little-used carbon.

The phrases covering brushes, plates, and carbon specialties have been subjected to extraordinary undervaluation, misinterpretations, and misclassifications, so that, had not the war given the carbon industry in this country needed protection, large and important parts of the industry would have been transferred to Europe.

The carbon industry respectfully suggests that the paragraph relating to carbons be revised and so classified that each branch of the industry will stand by itself. This will remove all ambiguity and uncertainty.

The carbon industry naturally divides itself into four classifications; the first relating to light, the second to heat, the third to power as applied to electrical apparatus, and the fourth to a multitude of specialties and all other forms of manufactured carbon.

ARC-LIGHT CARBONS.

Taking up these four classes of carbon products seriatum, it is respectfully suggested that all arc-light carbons be combined and accorded one ad valorem rate. The present law and Treasury Decisions divides them into three classes, viz, those made entirely of petroleum coke, those of chief value of lampblack, and carbons for flaming arc lamps. Arc-light carbons made entirely of petroleum coke have not been and probably will not be imported, while those of chief value of lampblack, which also include many important grades of flame light carbons, have been and are now being imported into the United States in large numbers. The homogeneous or solid flaming arc carbons, which are by court decisions the only ones assessed as "carbons for flaming arc lamps, not specially provided for in this section," are only used to a small extent and not at present imported.

The arc-light carbon paragraphs of the present and previous tariff laws have been subject to continued evasion and on account of unfortunate phraseology; the apparent desire of Congress has been decidedly altered. The grades of arc-light carbons now important and which are again being imported in large numbers are of such varying sizes and values, ranging from $20 to $1,200 per thousand, involving the extending use of flaming arc carbons into

practically all fields, that in order to avoid a continuance of misclassification and litigation arc-light carbons should be combined and given equal ad valorem protection.

In this division of carbon products are the motion-picture projector carbons. It is interesting to note that, owing to court decisions interpreting the tariff act, no adequate protection was given to this form of carbon, and over 90 per cent of them were produced in foreign countries, principally Germany, prior to the World War.

This part of the carbon paragraph also includes the remarkable flaming arc carbon used in all forms of photography. It also includes the extraordinary searchlight carbons which were used by the United States and the Allies. These unprecedented high intensity flaming arc searchlight carbons had been employed by the Germans and gave them the use of a searchlight so superior to any that had been produced by the Allies that it is a matter of official notation in the report of the Battle of Jutland that these German searchlights gave them an advantage in the initial stage of the battle so great that it threatened to turn the scale. With a knowledge of the existence of these searchlights, the carbon industry of the United States met the situation and supplied our country and the Allies with the new carbons which gave a light of equal intensity.

ELECTRODES.

The carbon products relating to heat are electrodes for electric furnace and electrolytic purposes and constitute an important and well-defined group which has heretofore properly been subject to an ad valorem rate. In the present law they are combined with "battery electrodes, brushes, plates, and disks," which have individual compositions and characteristics suited to their uses, and which differ widely from electrodes for electric furnace and electrolytic purposes. It is therefore believed that they should receive separate classification.

Carbon electrodes vary from round or square bars of carbon 2 or 3 inches in cross section to masses of carbon for the great electric furnaces 24 inches in diameter and 8 or 9 feet long.

The production of electrodes in Germany has increased largely. The Siemens firm have expanded their works at Lichtenberg and erected a new factory near Cologne, the two having a combined capacity of 20,000 tons annually. The Plania works has doubled its capacity. The electrode-producing works in Germany are working at full capacity. The price of electrodes for the German market is 3,200 marks per 1,000 kilograms, or 2.03 cents per pound, calculated at 1.4 cents per mark. The export price is said to be 3.56 cents per pound, the duty, however, will be paid on the home market value of about 2 cents per pound. The price for consumption in Germany presumably includes a profit.

Electrodes are the basis of the electric furnace industry, and without which, it has been truthfully said, war under modern conditions could not be successfully conducted. No further comment is necessary to show the significance and necessity for protecting this phase of the carbon industry.

BRUSHES.

The third division relates to power as applied to electrical apparatus. Brushes for electric motors, generators, and other such electric machines occupy a distinct and large field. They are at present classified with "Electrodes for electric furnaces, electrolytic, and battery purposes" and with "Plates and disks." However, they are used on such a variety of electrical equipment and have so many different compositions that they should be separately described in the tariff act and not simply mentioned. Indeed, the apparent simplicity of the present act has lead to brushes and brush plates on which have been expended all of the research and development expense and all of the manufacturing cost up to the final shaping and finishing, being variously classified as brush plates at $25 per cent ad valorem, manufactures of carbon not specifically provided for at 20 per cent, and in fact as a metal product of as low an order as to be accorded only 5 per cent protection. Separate classification and definition are obviously necessary. There are 8,000 different shapes, sizes, and kinds of brushes. Without these brushes the electrical development of our country would be impossible. The highest technical skill and research are necessary to meet the new requirements which the growth of the electrical industry is making necessary. The brush industry, after the experimental period and when the production of a certain class of brushes has become standardized, has been

and is peculiarly subject to competition by quantity production abroad of these standardized sizes, leaving the burden of research upon the manufacturers in this country.

The carbon brush is usually composed of carbon and graphite or graphite and metal and is an essential element in the operation of most electrical motors and generators. The efficiency of an electrical installation may vary by a large percentage, because of the good or inferior quality of the brushes used. The electrical industry as a whole depends not only for its efficiency but for its actual operation upon the electrical brush successfully manufactured. It is readily seen that this is a highly essential industry both in peace and war.

CARBON SPECIALTIES.

The fourth general division of carbon products contains those articles and wares commonly known as carbon specialties not specially provided for and which on account of their endless variety can only be covered by an ad valorem duty.

Carbon specialties cover a multidue of objects and uses which enter into the industry as important and necessary factors commercially. All electrically operated elevators and many other kinds of electrical eqipment depend upon carbon circuit-breaking contacts. Carbon specialties also include carbons for electric welding, bearings, bushings, lightning-arrestor carbons, etc., in great detail. It is probable that more care and skill and a greater proportion of labor is used in the manufacture of specialties than in any other carbon field. In one notable case which may be used as an illustration certain granules of carbon, approximately three one-hundredths of an inch in diameter and each one hollow, are produced for ear phones for the deaf, wherein the labor cost alone is $40 per pound.

In the carbon specialties also is that remarkable product of the war known as activated carbon, which absorbs more poisonous gases than any other form of carbon hithereto produced.

Electrical carbon specialties include a vast variety of products, varying from the great packing rings used in turbine engines and absolutely essential to the successful operation of such mechanism, to the minute grains of carbon and carbon disks for telephones. The ramifications of the uses of carbon specialties is too far reaching and too great in detail to be fully discussed. These specialties require the highest technical skill in manufacture and the nicest adjustments as regards dimensions and accurate formation.

The provision in paragraph 81 for "unmanufactured carbon, not specially provided for in this section," covers retort carbon, a by-product of the coal-gas industry. Imports have for the past four years averaged less than $600 annually in value. This material should properly be assessed under the unenumerated unmanufactured basket clause.

This reclassification of carbon products will do much to overcome uncertainties and ambiguities in the present law and will obviously simplify its administration.

THE INDUSTRY, DOMESTIC AND FOREIGN.

The carbon industry in the United States is composed of 38 independent companies located in the States of Massachusetts, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, Missouri, and California. The average number of employees, during the year 1920, was approximately 4,000.

In foreign countries, the carbon industry has been firmly established for many years. The location and number of large companies, according to prewar records, is a follows: Germany 12, Norway 11, England 8, Sweden 4, France 4, Canada 2, and South Amrica 2. There is also at least one manufacturer in Austria, Italy, Spain, and Japan, and there has been a large increase in the number of plants in operation all over Europe.

The American carbon industry, both prior to the World War and since, has been injured by ruinous foreign competition. As an example, foreign motion-picture projector carbons, on account of the lack of adequate protection prior to the war, were regularly sold at prices below the American cost of production, and, as a result, practically none of these carbons were made in the United States, and the annual importations amounted to above 17,000,000. During the World War, however, the United States manufactured not only these 17,000,000 but met the increased demand of the moving-picture industry. However, during

the last three months of 1920 the foreign carbons came back in rapidly increasing quantities, and are even now being sold in the United States at the rate of over 1,000,000 a month, which means at two-thirds of the prewar rate, and we are still at war with Germany.

The Siemens Co., near Berlin, manufactured a large stock of arc-light carbons, particularly those for motion-picture projection, for shipment as soon as the restrictions of the war should cease. One company in Germany, in December, 1920, was negotiating a sale of arc-light carbons to their United States agents valued at over $1,000,000 and the price they were to receive was about the same in dollars as before the war.

It will interest Congress to know that the existing tariff of 40 cents per 100 feet not only applies to motion-picture projector carbons, on which, by the way, it is an equivalent of about 6 per cent ad valorem, and which is, of course, entirely inadequate, but the interesting fact is that owing to a court decision, previously mentioned, the high intensity searchlight carbons which gave the navies of the United States and the Allies a searchlight equal to the best that the Germans had, and which have a value of $1,200 a thousand, may be imported under the present interpretation of the tariff law at 1 per cent ad valorem, whereas it appears to have been the clear intent of Congress to classify flaming arc carbons at 30 per cent ad valorem.

A second example of the injurious foreign competition relates to brushes. It has been previously stated that brush plates, which need only the final machining to size to constitute them actual brushes, have been imported as manufactures of carbon at 20 per cent ad valorem, and those having a more or less metallic appearance, as brazier's copper plates, at only 5 per cent. The metallic content of these metal-graphite brushes is a highly manufactured article and is by the present law accorded a protection of 25 per cent, as bronze powder. These impalpably fine metallic powders, used as raw materials and combined with the most refined graphite, constitute, perhaps, the highest expression of the carbon-brush industry. These are the ones, in cheap-looking plate form, which have been improperly classified because of misrepresentation, undervaluation, and the ambiguities of the present law, and have entered at 5 per cent. A further difficulty is that there is no wholesale market value in the country of their origin. This utter confusion in classification renders statistics of imports of brushes incomplete and misleading and the actual imports can only be judged by the orders the American manufacturers are losing to the importers because of the extremely low prices quoted on foreign brushes.

RAW MATERIALS AND LABOR.

The raw materials used in the carbon industry are coal, coke, lampblack, graphite, powdered metals, pitch, tar, and oil. They represent a comparatively low percentage of the cost of production. The principal element of cost is the labor of manipulation and manufacture, together with the constant analysis and control which must be exercised to produce articles demanding such technical accuracy.

A survey showed that the average wage of the entire industry in America for the year 1920 was 66 cents per hour.

An investigation completed in December, 1920, showed that the average wage of the carbon industry in Germany was 10 cents per hour, and that labor was as efficient as it was before the war and fully equal, man for man, to the best practice here.

The chief competitor being Germany, the hazardous conditions confronting the American industry are clearly evident.

CONCLUSION.

In asking for the above suggested reclassification of carbon products and adequate protection, the industry has taken into consideration the facts: First, that the technology of the industry and the volume of production as well as the sources of raw material are in a highly developed state in Europe generally, and especially in Germany. Second, the industry finds that not only is there a great wage difference but there is an exchange condition which will last for several years which accentuates dangerously the difference in the wage scale. Carbon commodities are sufficiently valuable in relation to weight so that the cost of transportation is an item of negligible importance and there is no freight protection.

Should the unfortunate tariff condition from which the industry has suffered in the past continue, large and important products of the carbon industry will be made abroad instead of here, the skill and art for their production will be lost, and should the country become dependent upon foreign sources of supply it is not to be expected that the importer will charge less than the highest price he can obtain.

The carbon industry gives employment to 4,000 hands, a large proportion of whom are skilled in the art of carbon manufacture; it has a capacity to meet the requirements of the United States; it possesses the ability to produce a quality of product equal to that of any other country in the world; it manufactures articles of very great importance to our country, and, in many cases, vital to its progress industrially, and of paramount importance in case of war.

It therefore asks that a duty be placed upon its products which will meet, as far as possible, the difference in cost of production in the United States and abroad. The industry feels that it should be given an opportunity to continue the great and necessary research to keep it abreast of the progress of the world, and in view of the fact that there are numerous manufacturers of carbon products in the United States, and the business is highly competitive in all fields, it believes that with increasing volume of production and a reasonable certainty of permanent development, costs and prices will be reduced and the country highly benefited.

A matter of extreme importance to the United States Government as well as the industry is that due consideration be given to changes in the wording of the paragraphs 81 and 82 so that the possibility of evasion and undervaluation disclosed above may be prevented and both the revenue and the protection which Congress accords the industry shall be collectible and real.

CHEMICAL AND LABORATORY GLASSWARE.

[Paragraphs 83 and 84.]

RALPH BARBER, REPRESENTING THE VINELAND FLINT GLASS WORKS AND VINELAND SCIENTIFIC GLASS CO., OF VINELAND, N. J.

Mr. BARBER. We particularly wish to speak of chemical and laboratory glassware. There is not much that I can add to the testimony already offered to your committee in June, 1917, and to the subcommittee of the Senate Finance Committee in December, 1919.

Mr. BACHARACH. You say June, 1917?

Mr. BARBER. Yes; June, 1917, and December, 1919—1919, rather.

Mr. BACHARACH. That is what I thought.

Mr. BARBER. Chemical and laboratory glassware is of vital importance to the country, being a key industry, as shown by the testimony of various witnesses in the hearings before the Ways and Means Committee of the House on June 11, 12, and 13, 1919, and the further testimony taken before the subcommittee of the Finance Committee of the Senate on December 12 and 13, 1919, such testimony being offered by Mr. Frank J. Sheridan of the Tariff Commission, and others. We desired to ask that in framing a new tariff law for the protection of this very important industry, particularly that the duty-free clause be eliminated, and that there be established instead some protection to permit the growth of this very important part of the glass trade.

In the hearings before this committee on June 11, 12, and 13, 1919, and before the subcommittee of the Senate Finance Committee on December 12 and 13, 1919, sufficient and very reliable testimony was offered, particularly by Mr. Frank J. Sheridan, member of the Tariff Commission, as a result of his investigation during January, 1918,

which you will find on page 30 of House of Representatives bills 3734 and 3735. He says in part:

I would say, entirely separate and distinct from the old established industries, that for these two industries an almost prohibitive tariff would be a very desirable thing.

Mr. GARNER. When was this statement made?

Mr. BARBER. That statement was made June 12, 1919, before this committee.

Mr. GARNER. The House of Representatives passed a bill, did it not, having for its purpose the protection of this industry, and you had a hearing before the Finance Subcommittee of the Senate?

Mr. BARBER. Subcommittee, in December of the same year.

Mr. GARNER. You got no action in the Senate?

Mr. BARBER. No action in the Senate, so far as I know.

Further on in his testimony, on page 21, he says:

My suggestion was that without reference to difference in cost or knowing anything about it, it would be a good thing to give these industries a chance to grow.

Another reason is that we are now facing serious competition with a new competitor from the Orient, which threatens to close our plants, and they are now actually closing down from competition with the cheap foreign labor and long hours.

On page 31, under the testimony of Mr. Clarke, president of the American Flint Glass Workers' Union, tabulated figures show the enormous growth of the Japanese glass industry, and one item alone, thermos or vacuum bottles, were not exported until 1917, when $242,984 worth were exported. In 1918 $400,194 worth were exported, and to-day they are dumping on our markets an inferior bottle, which is threatening the life of our industries, being offered at a price which prohibits us from competing, especially when these bottles are cased and a lower rate of duty applied because they are cased.

By far the most important reason is that we have entirely eliminated the cause for any duty-free clause or low tariff, because we are now able to produce and do produce a better grade of goods, thereby making this Government entirely dependent on its own industries for its requirements and not being in a position where we were compelled to depend on the Old World for chemical or other glasswares.

I will not go along with any more of these figures, as Mr. Gillooly, who preceded me, gave the labor figures on the different importations from the other countries.

The importance of these industries was clearly demonstrated by testimony to be key industries, and they were so considered by Germany before the war, and while small in quantity they are more important than many of the larger industries, for without a supply of these items other industries would not be able to function. These industries, built up and developed at the earnest request of the Council of National Defense, will be destroyed unless they are protected. Domestic costs and production in a comparative scale can not be given at this time, because we have not the figures on wages, but we do know that in Japan, as the testimony before the Committee on Ways and Means shows, in a letter that was introduced by Mr.

Bacharach, from the Secretary of the Department of Commerce, in answer to a letter of June 15, 1919.

I want to state, Mr. Chairman, that was about as far as I was able to get along with my brief. I am unable to give you exact figures. I am not coming before this committee with statistics as to the value of that industry in dollars and cents. It should not be measured in dollars and cents, but should be measured in the success of the Nation in any undertaking that it might have. Prior to the war you were entirely dependent upon foreign countries for your laboratory and chemical glassware. At the earnest request of the Council of National Defense the American manufacturer took up the question of the necessity of supplying you with the absolutely necessary glassware for the successful conduct of industries in this country. That they have done it well can not be denied. Now we ask that you will at least give us some consideration and not let these industries be destroyed.

Mr. HAWLEY. Are you acquainted with the bill as reported by this committee and passed by the House some time since?

Mr. BARBER. I am acquainted with it, in view of the fact that we followed it fairly closely.

Mr. HAWLEY. Are you satisfied with the rate proposed in that bill?

Mr. BARBER. That is a question I would not like to answer just at the present time. There are conditions arising now that are entirely different from what they were at the time that bill was proposed.

Mr. HAWLEY. That was not my question. At that time we passed a bill in accordance with the information we then had.

Mr. BARBER. That was satisfactory at that time.

Mr. HAWLEY. I want to know if your present opinion is, based on the information you have, that those rates are satisfactory?

Mr. BARBER. We are satisfied that the duty-free clause should be eliminated, regardless of anything else. So far as the amount of protection required is concerned, we are unable to give you just exactly what figures would be necessary to protect the industry. Some of this stuff is being dumped on this market at the present time. It is not a question of dollars and cents. It is a question of whether they are going to destroy that industry in this country again, or whether they are going to permit us to maintain an industry that we know is absolutely necessary for the welfare of the Nation.

Mr. GARNER. My recollection is that you told us about a year and a half ago—not you personally, but somebody representing the industry—that if you did not have an emergency bill at that time the Japanese or somebody else would put you out of business within a year.

Mr. BARBER. I might add that is absolutely true. They have put at least 35 per cent of these people out of business.

Mr. GARNER. It looks like the Senate did not respond, then, to the necessities of the people after they had this hearing over there in December.

Mr. BARBER. That is not the fault of the American manufacturer. I will assure you that. He did his part.

Mr. GARNER. They have some very good friends on the Finance Committee of the Senate.

Mr. BARBER. That is something we are not responsible for.

Mr. GARNER. You come from New Jersey, I believe?

Mr. BARBER. Yes, sir. I am proud of it.

Mr. GARNER. You are not from Pennsylvania?

Mr. BARBER. It does not make any difference. I am proud I came from New Jersey.

Mr. BACHARACH. You spoke about glass for the laboratory. You believe, of course, that there should be a protective tariff on it, for the laboratory glass, just the same as you did before. Do you believe that the rate of duty should be the same as you advocated before?

Mr. BARBER. I don't quite understand you, Mr. Bacharach.

Mr. BACHARACH. You know you were before this committee in June, 1919, and you advocated that there should not be any duty-free chemical glass?

Mr. BARBER. Yes, sir.

Mr. BACHARACH. And you advocated 45 per cent, did you not?

Mr. BARBER. Not less than 45 per cent—60 per cent.

Mr. BACHARACH. Do you still think that would be sufficient for your needs?

Mr. BARBER. I think that 60 per cent would be sufficient at the present time to permit the American manufacturer to maintain at least a good part of their business. There are some items that 60 per cent would not help. There are a great many items that it would help. There are some items that possibly 100 or 200 per cent would not help.

Mr. BACHARACH. At that time you recall your only competition was from Japan. You have German competition now?

Mr. BARBER. We have new German competition, and we have Japanese competition, which is more serious than German competition ever was.

Mr. GARNER. How do you get German competition?

Mr. BARBER. Not through Germany, but through England.

Mr. GARNER. That is what I wondered. I heard you say you have German competition.

Mr. BARBER. It is German-made goods, regardless of how it gets in here.

Mr. GARNER. How does it get here?

Mr. BARBER. I am not qualified to answer how it gets here, but I do know that there are goods being offered in the market to-day through England in this country, made in Germany, at ridiculously low figures.

Mr. HAWLEY. That is, made at the low figures, or offered at the low figures?

Mr. BARBER. Made and sold. I have got some here that I could exhibit.

JOHN B. O'BRIEN, REPRESENTING THE FLINT-GLASS WORKERS' UNION, PITTSBURGH, PA.

Mr. O'BRIEN. I represent the flint-glass workers. My residence is Vineland, N. J.

Mr. Chairman, I don't believe I care to take up very much of your time, inasmuch as I appeared before this committee in June, and also before the Finance Committee in December of 1919, and what tes-

timony and data we had at that time we have presented to your committee and also to the Finance Committee. At that time we had pleaded for an emergency tariff in order to protect the industry that was developed during the war, namely, the chemical and laboratory glassware. We feared at that time that unless something was done to protect the industry of this country and the worker along those lines of laboratory and chemical glassware something was going to happen that would be a serious handicap to the manufacturers and the workers and to the welfare of the country. What we feared at that time has happened. Since we appeared before your committee all the factories and shops that were developed during the war period have practically been eliminated, so far as placing the product on the market is concerned. I dare say from that time up to the present time there are hardly 20 per cent of the men working in that industry and about the same amount of ware being produced in this country that was produced during the war. That was due to the foreign importations. We had competition from Japan at that time, which was very serious. It has been more so in the last year—not only in chemical glassware and laboratory glassware but also in the thermos-bottle department and other lines coming in close competition.

Last week I had occasion to go to New York, and I came in contact there with the German ware that was being imported into this country, not by the German agents but by the English agents, namely, on the thermos bottles. They were importing them from Germany through England into this country, and they were quoting them there at a figure that was almost prohibitive for us to manufacture them or to work for in this country. For instance, they have quoted on a pint filler at 22 cents sealed. That means the double bottle. The cost in this country to produce the same thing, in the factory alone, is approximately from 28 to 30 cents. On a quart they quote the same thing at 28 cents, which costs to produce in this country approximately 36 cents.

Japan has been importing them since 1917. This [indicating] is one of the bottles that they import in this country, stamped right on the bottom of it "Made in Japan." That was the bottle I purchased from Kimball Bros. Department Store in Philadelphia for $1.15. It may look to be an all-right bottle, but it is a very crude one when you understand that bottle. Here is the bottle, the cheapest one I could purchase, produced by the American Thermos Co., by American workmen, which cost $2.75.

Mr. TREADWAY. That is the retail price?

Mr. O'BRIEN. The retail price; yes, sir. This one was $1.15, retail price.

Mr. HAWLEY. How do they compare?

Mr. O'BRIEN. This Japanese bottle, Mr. Congressman, if you don't understand the workings of the bottle, once your filler, the glass bottle on the inside, becomes broken, you might as well destroy it, because there is no way at all to replace it, unless you take and cut the bottom out here. There is a flange there, and it is welded over the flange. By putting another filler in there, if you don't understand the workings of it, you will break every filler you put in there.

This American-made product, you can take your filler out, after it once breaks, and have another one replaced without very much

trouble. You understand there are two bottles in one, and the chief value of that is the vacuum. It is not the glass, but the vacuum that is in there. These bottles come in in this form, just in the glass form, under your 45 per cent duty. When they come in in this form, in the casing, they come in under your metal schedule at 25 per cent duty.

Mr. BACHARACH. Can you take that Japanese one apart, as you have the American one?

Mr. O'BRIEN. No, sir; you can not, unless you cut this bottom out.

Mr. BACHARACH. That is what you meant by cutting them?

Mr. O'BRIEN. Yes, sir. So that we are placed at a 20 per cent disadvantage by these coming in in the casing, under the metal schedule.

Mr. RAINEY. Can you get the broken part of that bottle?

Mr. O'BRIEN. Yes, sir; you can get what you call the refiller. This is what you call the refiller.

Mr. RAINEY. You can get that from the factory?

Mr. O'BRIEN. Yes, sir. As stated, it costs 28 to 30 cents on this size bottle to manufacture that in the factory. That does not include this outer bottle. There are two bottles made there. Then they are taken to another factory, where the smaller bottle is pushed into the larger one, and they are sealed on the bottom and top. There is practically three times the amount of work after it leaves the factory as in the factory. That is what runs the cost up on those bottles.

There is a concern here only last week that had purchased 1,000,000 of these bottles from abroad. One million practically means one-sixth of the bottles produced in this country. The average production in this country would amount to about 6,000,000 bottles—that is, the thermos bottle complete. That otherwise would amount to 12,000,000 bottles, as it is a double bottle. That concern purchased 1,000,000 of these last week. They also have a factory in Japan, and the result is that our men are walking the streets, the factories are not working, but the ware is coming in just as fast as the importers have got the money, I judge, to pay for it.

The CHAIRMAN. I remember you were here last year before the committee, and after you had appeared the committee reported out a bill and it passed the House and is now in the Senate. Are you familiar with the rates that were incorporated in that bill as it passed the House; and, if so, are they satisfactory to you now?

Mr. O'BRIEN. With the duty-free clause eliminated, Mr. Chairman, we may be in a position to get along with it, but with the volume of ware being imported into this country, and with the closing of our factories, I would say that 60 per cent would not be satisfactory to me, not from my standpoint.

The CHAIRMAN. That is the rate you got in the bill we passed?

Mr. O'BRIEN. That is, not under 45 per cent up to 60 per cent.

Mr. HAWLEY. Have you any suggestion about a change in the phraseology of the schedule to cover the importation of Japanese bottles in the finished form as metal products?

Mr. O'BRIEN. I am firmly of the opinion that there should be a double duty on it, coming under the metal schedule.

Mr. TREADWAY. How long have thermos bottles been made in this country?

Mr. O'BRIEN. Not so very long.

Mr. TREADWAY. What I was getting at was whether in making the previous tariff bills the item of thermos bottles was taken into consideration?

Mr. O'BRIEN. I don't believe until the tariff bill of 1913 they were ever taken into consideration.

Mr. TREADWAY. That was not based very much on protection to American industry.

Mr. O'BRIEN. At that time this was only an infant industry—that is, so far as manufacturing them was concerned.

Mr. TREADWAY. The reason you import that bottle at 25 per cent is because the principal component part of that bottle is metal.

Mr. O'BRIEN. I think the casing on that would not be worth 1 cent in commercial value.

Mr. TREADWAY. Why did they put it on the metal schedule?

Mr. O'BRIEN. I don't know.

Mr. TREADWAY. The customs people are supposed to interpret and enforce the law as it is written, and unless the principal part of that bottle comes under the metal schedule it could not be passed.

Mr. RAINEY. You mean the raw material?

Mr. O'BRIEN. The casing—so far as the purpose of the vacuum bottle is concerned, it is the inside filler that is practically the principal part of the bottle.

Mr. GARNER. If it only costs 22 cents and the other portions of the bottle are worth less than 1 cent, how do you sell it at $1.15?

Mr. O'BRIEN. I don't know, Mr. Congressman, you will have to get that from the manufacturer. That is all I can say.

Mr. GARNER. The retailer must be making some money.

Mr. O'BRIEN. Maybe they are. I don't know.

Mr. RAINEY. You say that would not be worth 1 cent?

Mr. O'BRIEN. I say so far as the casing is concerned it would not be worth 1 cent.

Mr. RAINEY. It would not be worth anything without the inside. What does that casing cost? Do you say that could be produced for 1 cent?

Mr. O'BRIEN. No. I say so far as its connection with the bottle is concerned. I know this, that on the German——

Mr. RAINEY. Does it cost as much as the glass container inside of it?

Mr. O'BRIEN. I judge it would; yes, sir.

Mr. GARNER. So it is on that score. There is no trouble about that at all. In other words, the American bottle selling at $2.25 costs more to make the case than it does the inside.

Mr. O'BRIEN. To produce the glass in this form in the factory, but not after it leaves the factory, and it is made up in the finished article.

Mr. GARNER. Then the glass would cost more?

Mr. O'BRIEN. The work on it. The work on that bottle, after it leaves the factory, goes through, I judge 10 or 12 hands before it is through. It has got to be placed in an oven and the vacuum pumped into it.

Mr. TREADWAY. What is the percentage of the final cost of that American bottle, in your opinion?

Mr. O'BRIEN. I could not tell you really what the final cost is, Mr. Chairman, for after it leaves our factory that has gone into another department entirely.

Mr. TREADWAY. Do you think 60 per cent of the cost of that bottle is labor?

Mr. O'BRIEN. Sixty per cent labor? Yes, sir.

Mr. TREADWAY. More than that?

Mr. O'BRIEN. Yes, sir.

The CHAIRMAN. Raw material would be a very small proportion of the total cost, would it not, Mr. O'Brien?

Mr. O'BRIEN. For the one individual bottle; yes, sir.

Mr. Chairman, on laboratory glass, if you people will eliminate the free-of-duty clause we may be in position to do something, so far as keeping the industry going, but if you put 1,000 per cent on with the free-of-duty clause in there it is not going to help us one iota.

The CHAIRMAN. You want the duty-free clause eliminated?

Mr. O'BRIEN. Yes, sir.

Mr. BACHARACH. That is called for in the present bill as it passed the House?

Mr. O'BRIEN. Yes, sir.

Mr. TREADWAY. You named the concern who made that bottle?

Mr. O'BRIEN. The American Thermos Co. is stamped on the bottom, with factory at Norwich, Conn.

Mr. TREADWAY. Have they a monopoly in this country?

Mr. O'BRIEN. They have not a monopoly in this country; no. There is the American Thermos Co., the Vacuum Specialty Co., and the Simplex Co., all manufacturers of these bottles.

Mr. TILSON. Are they manufactured separately—the glass part and the metal part?

Mr. O'BRIEN. Yes, sir.

Mr. TILSON. Then they are assembled by somebody else?

Mr. O'BRIEN. Assembled by some other factory; yes, sir.

Mr. Chairman, I would like protection given to the American worker that is given to the workers in the other countries—I would say in England. On the 18th day of December, 1918, less than six weeks after the armistice was signed, the I. C. Young Co., Cincinnati, Ohio, with a chain of drug stores in London, made application to the Government for license to import 500,000 bottles from this country into England, and that privilege was denied these people, but the privilege was granted to them to import them from Japan or Italy. That was in less than six weeks after the armistice was signed. That statement is an absolute fact and can be borne out by facts, and I believe the record is in this city some place. If not, it can be produced by the time you are going to report your bill.

The CHAIRMAN. I wish you would produce that for us.

Mr. O'BRIEN. I will.

Mr. BACHARACH. And that I. C. Young Co. is an American company, of Cincinnati?

Mr. O'BRIEN. Yes, sir.

Mr. BACHARACH. And they were refused the right to bring the goods, according to your statement, from this country to England?

Mr. O'BRIEN. Absolutely; yes, sir.

Mr. BACHARACH. I think if you can produce evidence of that, as the chairman says, we will be very glad to have it.

Mr. O'BRIEN. All right. Mr. Chairman, I am going to send you that statement under the signature of that department.

The CHAIRMAN. We will appreciate it very much, Mr. O'Brien, if you will do that.

Mr. O'BRIEN. And they are also practically putting an embargo against our other wares going in there, just the same as they have done on the dyestuffs in the past week.

PRESSED AND BLOWN GLASSWARE.

[Paragraphs 83, 84, 92, and 95.]

EDWARD J. BARRY, REPRESENTING THE NATIONAL ASSOCIATION OF PRESSED AND BLOWN GLASSWARE MANUFACTURERS.

Mr. BARRY. Gentlemen, I come here in the interests of the National Association of Pressed and Blown Glassware Manufacturers, feeling that the tariff should be increased on imported glassware. The reason for that is that we are employing in this country about 7,000 people, skilled workmen, and in addition about 30,000 people given employment, unskilled.

We come in competition with the importation of glassware in its various branches. Of course during the period of the war we have not encountered that competition, I think, so much, but previous to that the importations had grown to such an extent that we felt it growing and infringing on our business. In the last 11 months of the past year the importations of glassware into this country have grown to a great extent, far more rapidly than we anticipated they would.

Mr. OLDFIELD. How much has it been?

Mr. BARRY. About $7,000,000.

Mr. OLDFIELD. What was the production of this country?

Mr. BARRY. The value of our entire production of this branch of the industry is approximately not over $100,000,000.

Mr. OLDFIELD. Five millions have been imported?

Mr. BARRY. Seven.

Mr. OLDFIELD. A rather small percentage, is it not?

Mr. BARRY. Well, it is, under the conditions. Of course we realize the fact that there is not an opportunity at the present time for the European manufacturer to come in here as fast as he did previously.

Mr. OLDFIELD. How much do we export out of this country?

Mr. BARRY. I really could not give you those figures. I have not got them at hand.

Mr. GREEN. This is just blown glassware?

Mr. BARRY. Yes. We meet with that from the countries of central Europe and Belgium and Austria a great deal, and it affects our sales in this country to a great extent. That is due, of course, perhaps to the low wages that have been paid over in Europe as against the wages paid in this country. We have been, like all others, during the progress of the war—we have increased our wages ranging from 95 per cent to 150 per cent. We are all glad to see the American workman get the benefit of his skill and a means and method of living that he and his family will enjoy, but we believe that he should be protected on those articles with which we come in competition.

Mr. OLDFIELD. Where do the exports from this country go? To what countries?

Mr. BARRY. Well, South America, perhaps, and some to Europe; but it is a very small quantity to Europe. South America and Australia, some from the western part.

Mr. OLDFIELD. And Canada?

Mr. BARRY. Canada gets some. We feel as though the tariff at the present time is low and that when everything returns to normal again, if we do not ask for protection as the present time we will find ourselves more or less in a precarious position. Therefore I am here to ask your indulgence on that, and also to file a brief covering any detailed information that we desire.

Another point I might bring forth is that in the glass schedule, No. 84 and No. 83, we are covered in connection with so many different articles that it is hard for us to classify, and undoubtedly is hard for the man at the port of classification. We are hooked up in a certain measure with the bottle manufacturers on their importations, and stained glass and other glasses, and in our brief we are requesting the committee to take into consideration the elimination of some of them, as stated by Mr. Morrison, of the bottle manufacturers—I happened to be in the room when he was speaking—and to make a segregation of it so that at the various ports the glassware can be assessed under a proper schedule.

Mr. OLDFIELD. What is the duty now? Thirty and forty-five per cent?

Mr. BARRY. The duty is now 45 and 30 per cent.

Mr. OLDFIELD. It was 60 per cent?

Mr. BARRY. It was 60. I believe I have covered that.

BRIEF OF THE AMERICAN MANUFACTURERS' ASSOCIATION OF FLINT AND LIME GLASS MANUFACTURERS AND THE NATIONAL ASSOCIATION OF PRESSED AND BLOWN GLASSWARE.

SIR: Acting as a committee representing the American Manufacturers Association of Flint and Lime Glass Manufacturers and the National Association of Pressed and Blown Glassware, incorporated and having for its membership 93 glass manufacturers engaged in the production of glassware as covered by Schedule B of the tariff act, October 3, 1913, we beg to submit the following for your consideration:

1. Change paragraph 84, Schedule B, to read as follows:

> Glass and glassware, and all articles of every description composed wholly or in chief value of glass, plain or figured, decorated, in any manner, cut, engraved, painted, decorated, ornamented, colored, stained, silvered, gilted, etched sand-blasted, frosted or painted in any manner, or ground. And all articles of every description blown or in part blown and completed by any other process, either in a mold or by any other method not specially provided for in this section, filled or unfilled whether their contents be dutiable or free. Sixty per cent ad valorem.

The wording of this paragraph has been changed so as to make it cover only the products made by the members of our association. Glass bottles and decanters, which were included in paragraph 84, Schedule B, tariff of 1913 (corresponding paragraph 98, Schedule B, tariff 1909), are covered by the new paragraph suggested by the National Bottle Manufacturers Association.

2. Insert a new paragraph in Schedule B as follows:

> Glass and glassware pressed or cast in a mold and not produced in combination with any other method of manufacture, plain or figured, crystal or colored but not decorated in any manner. The grinding in of stoppers is not to be considered as decorating. All of the foregoing, not otherwise specially provided for in this section, 45 per cent ad valorem.

This new paragraph is suggested to cover the ware that came under paragraph 83, Schedule B, tariff 1913 (corresponding paragraph 97, Schedule B, tariff of 1909), as referred to by the words "Or pressed" in line 1. The National Bottle Manufacturers Association has suggested the elimination of the said words "Or pressed" from said paragraphs.

3. Substitute for paragraph 92, Schedule B, the following:

Lenses of glass, crystal or colored, molded, cast or pressed, unfinished, fire finished, ground, polished edges or surfaces, made in any form or shape, not otherwise specially provided for in this section, 60 per cent ad valorem.

4. Paragraph 95, Schedule B, we recommend the removal from this paragraph all reference to incandescent electric bulbs and lamps and all following which refers to manufacture of glass or paste, not specially provided for, etc.

Our reason is that electric bulbs can not be classified with stained or painted windows and that glass not specially provided for should be covered by special paragraphs.

5. Insert new paragraph in Schedule B as follows:

Glass incandescent electric light bulbs and lamps with filaments, not otherwise specially provided for in this section, 45 per cent ad valorem.

6. Insert new paragraph in Schedule B as follows:

All glass or manufacture of glass or paste, or of which glass or paste is the component material of chief value, not specially provided for in this section, 60 per cent ad valorem.

7. Our reasons for asking for a substantial increase over present tariff rates covering Schedule B, as specially enumerated above, are as follows:

This branch of industry has not yet reached the machine stage of production, consequently employs a large number of skilled and unskilled labor.

Before the war our skilled labor received from 600 to 700 per cent higher wages than similar labor received in Belgium, Holland, central Europe, and Austria; and since 1916 our labor, like all labor, had a further increase of from 95 per cent to 150 per cent.

We understand that the labor of Europe also had substantial increases; in Belgium from 4 to 5 francs to 25 and 28 francs; in central Europe from 4 and 5½ marks to 50 and 60 marks; yet the exchange value with our money makes the figures compare as follows: At present German labor, 50 to 60 marks, equal 65 to 90 cents per day against our cost of $6 and $12 per day, or a difference of 700 to 1,000 per cent.

Besides competition from these sources, we shall have additional competition mainly from Japan whose labor is paid still lower. We believe we have a right to claim that our product is useful and necessary as well as artistic. It is a basic factor in the advancement of progress and civilization, and has never had the protection due it for proper development.

We use the raw material of our own country and form same into useful objects. No monopoly is possible as it requires but little capital to start a factory; hence our home competition is keen.

The value of the entire production of this branch of the industry is approximately not over $100,000,000, or only1 about one-eighth of the money spent for cigarettes or face powder by our people.

8. The number of skilled workmen employed in this industry is approximately 7,000, the number of unskilled approximately 30,000, and the approximate wages paid to labor is about $55,000,000.

9. The following shows the increase in prices of the chief materials used in the year 1920 over what they were in 1913, at the time the present tariff schedule was enacted.

Soda ash, 210 per cent; sand, 200 per cent; lime, 120 per cent; fuel oil, 200 per cent; gas coal, 235 per cent; steam coal, 225 per cent; natural gas, 375 per cent.

Within the last two or three months some of the materials enumerated have decreased in small percentages, but not in a sufficient amount to materially affect the cost of manufacture. It is also true that there has been slight increase in at least one of these items enumerated—we refer to natural gas.

10. The reason it is suggested that the tariff of 45 per cent be placed upon pressed glassware while 60 per cent is suggested for blown glassware is that what is known, generally speaking, as pressed glassware is not entirely made by hand, while blown ware is almost entirely made by hand, and in the past

where we have had to compete with European labor we have always been at a disadvantage in the market, even when the tariff was 60 per cent.

11. The above facts make it evident that the 1913 tariff is not a sufficient protection to American manufacturers, it being difficult for them to secure large contracts in many lines of goods—they having to depend largely for business to operate their factories on small orders, and special business, involving designs and articles of a local or transient nature, especially adapted to domestic trade, and making it possible for the foreign manufacturers to flood this market with their staple wares. There is no question but that American manufacturers would have been either driven out of this business or forced into other lines of manufacture if it had not been for the war, which virtually stopped all importations.

EDWARD J. BARRY,
MARION G. GRYCE,
W. A. B. DEZELL,
Committee.

JOSEPH GILLOOLY, REPRESENTING THE FLINT-GLASS WORKERS' UNION, TOLEDO, OHIO.

Mr. GILLOOLY. Mr. Chairman and gentlemen, I am here representing the workmen employed at the making of all pressed and blown glasswares except window glass.

Our international president, Mr. William P. Clarke, who appeared before this committee in December, 1919, is at the present time abroad making an investigation of the glass industries with a view of securing information relative to wages paid, hours of labor, working conditions, etc.

There is very little that can be added to what has already been testified to before your committee by our representatives, Messrs. Clarke and O'Brien.

I shall, however, present for your careful consideration figures that I have compiled from data secured showing the rapid gains made in the importation of glasswares into this country. Japan started in the glass business under the supervision of the Government in 1876 and transferred to private ownership in 1886. In the year of 1907 we find that the aggregate value of their product amounted to $1,557,805; in the year 1916 it amounted to $8,381,362. From these figures you will note that in nine years Japan shows a gain of 438 per cent in the year 1916 over the year of 1907. I am firm in the conviction that within the past four years even more rapid gains have been made. For example, in 1913 the value of their product was $2,925,425, and in 1916, or three years later, they increased to $8,381,362, an increase of 185 per cent in three years' time.

The number of tank furnaces in Japan in the year 1915 was 68; in the year 1916 it was increased to 106, which shows an increase in the building of furnaces to produce glassware of 56 per cent in one year. This will show with what rapidity the glass industries in Japan have grown. We learn that from 1915 to 1916 the number of pots in direct firing increased to 322. This, I believe, is as great an increase in pots in one year in Japan as there was in the United States in 10 years past. We find that in the year 1913 the number of employees in the glass trade in Japan was 8,869; in 1916 they employed 15,503, an increase of 75 per cent in numbers in the three years.

From information secured we find that previous to 1916 Japan did not export thermos bottles. But in the year 1917 they did export

this class of ware to the amount of $242,984; in the year 1918 they exported $406,194, an increase over the year of 1917 of 67 per cent; and since 1918 we are quite positive that the increase has been more rapid. The manufacturers in Japan have a great advantage over their competitors, due to the low wages paid their workmen. We are not in possession of any information at present relative to the wages that are being paid to Japanese workmen.

From data secured we also find that the amount of importations of glassware from Germany, Belgium, France, Austria-Hungary, Holland, Sweden, and other foreign countries is rapidly increasing, According to statistics, the aggregate amount of glassware imported into this country, beginning with the year 1910 up to and including June 30, 1914, was $20,685,665, or an average per year for five years amounting to $4,137,133.

We have no record of importation of glasswares from June 30, 1914, from abroad, except Japan, until the years 1918 and 1919. This was due to the fact that war was declared against Germany by England, Belgium, France, and other nations. This was responsible for stopping the importations, which enabled the American industries to expand and operate fully.

However, after the signing of the armistice these foreign countries again resumed their activities, especially Germany, and we find on investigation that the importation of glassware began again in the year of 1918, the total amount being $1,351,312. In the year 1919 it amounted to $2,058,525, an increase in importation over the year of 1918 of $707,213. I now desire to present to your committee the latest figures dealing on the importation of glasswares into this country, beginning January 1, 1920, and ending November 30, 1920, as follows:

Imports of glass and glassware into the United States, 1920.

Month.	Bottles, vials, demijohns, carboys, and jars, plain, ordinarily used as containers, empty or filled.		Bottles, decanters, and other glassware, cut or ornamented.	Optical instruments, including lenses, and spectacles.	Cylinder, crown, and common window glass, unpolished.	
	Quantity.	Value.			Quantity.	Value.
	Pounds.				*Pounds.*	
January	643,008	$29,306	$42,308	$56,479	172,553	$21,249
February	132,357	4,851	32,015	20,674	76,202	8,276
March	160,641	4,961	32,576	44,257	180,849	19,120
April	308,418	10,473	46,202	39,907	560,631	33,080
May	232,091	13,377	51,023	47,405	965,165	53,225
June	280,565	14,858	84,551	95,660	715,798	53,068
July	771,705	41,962	151,704	186,874	491,585	52,635
August	1,260,112	57,713	137,761	126,291	568,518	65,313
September	506,380	20,442	150,880	98,979	255,809	27,349
October	755,389	33,019	204,897	101,971	435,522	50,499
November	1,274,185	38,633	147,332	95,614	711,547	68,338
Total	6,432,646	279,174	1,081,249	843,201	5,064,360	513,221

Imports of glass and glassware into the United States, 1920—Continued.

Month.	Plate glass, cast, polished, unsilvered.		Plates, or disks, rough-cut or unwrought, for optical purposes.		All other.	Total.
	Quantity	Value.	Quantity.	Value.		
	Square feet.		*Pounds.*			
January	14,377	$8,117	87,964	$53,875	$115,879	$327,212
February	122,003	84,516	79,497	103,871	147,796	410,999
March	26,246	18,194	41,920	52,828	53,281	225,247
April	93,365	79,605	99,082	62,939	74,066	351,262
May	74,318	48,075	53,993	100,102	91,767	435,044
June	112,333	83,971	69,554	70,654	183,738	616,414
July	380,156	341,704	83,263	96,478	182,453	978,398
August	245,902	213,799	94,332	117,448	287,435	1,006,260
September	315,949	260,233	70,747	76,902	259,703	904,988
October	394,667	356,278	52,212	81,257	339,208	1,166,099
November	433,900	464,544	99,928	77,778	271,886	1,164,320
Total	2,214,216	1,958,036	836,552	894,130	2,007,232	7,581,243

We find that the importation of glassware in January amounted to $327,212; in February, $410,999; in March, $225,247; in April, $351,262; in May, $435,044; in June, $616,414; in July, $978,398; in August, $1,006,260.

The CHAIRMAN. The imports are chiefly from Japan, you say?

Mr. GILLOOLY. No; these are from all foreign countries from which importation had ceased during the war period. In September we find that the importations amounted to $904,988, and in October $1,166,099. In November it amounted to $1,164,320, or a total importation of glassware in 11 months amounting to $7,581,243.

Mr. HAWLEY. What are you reading from?

Mr. GILLOOLY. From data that I have bearing on the importation of glassware into this country for the last year.

You will note from the statement read that the aggregate amount of importations of glassware for 11 months (Jan. 1, 1920, to Dec. 1, 1920) were $7,581,243, or $5,522,718 greater in 1920 than in the year 1919. From the figures presented for the past year it shows an alarming situation, which necessitates our appearing before your committee to plead for the enactment of a higher tariff on all glassware, which will afford some protection to the workmen and the manufacturers. There has never been any dispute as to the necessity of a tariff on glassware. The framers of the Underwood law recognized this when they recommended a duty of 45 per cent ad valorem on certain items, which was three-fourths of the rate provided for in the Payne-Aldrich bill.

With a view of having a higher tariff on glassware in order to protect the American workmen and the industry, I herewith present exhibits marked "A," "B," "C," "D," and "E," which provide for a schedule of tariff. We do not believe that the workmen and manufacturers should be called upon to make the sacrifices necessary to compete with European producers, when the Government can afford us the necessary protection and at the same time derive a considerable revenue from the duties collected. Since the year 1913 the workers have been obliged to make many sacrifices due to the evil of foreign competition; the manufacturers likewise have suffered

greatly. In the past year the unlimited system has been adopted in departments that previously worked the limited system of production. This new system of working was adopted for the express purpose of cooperating with the manufacturers in order that they might be able to meet foreign competition.

In order that you gentlemen may know the average wage received by the men employed in the glass industry, I herewith quote same, as follows: For the year 1914, figuring 50 weeks, they averaged $16.25 a week. In the year 1915 they averaged $14.50. I will skip 1916 and 1917, as I have not those figures with me. In 1918 the average wage was $23.59. For the years 1919 and 1920 our records show that 8,042 members were employed for 50 weeks, and the average earned by each member amounted to $1,531.79, making the weekly average wage per member $30.63.

Mr. BACHARACH. I want to ask a question, if I may. How many men are engaged in the glass industry in this country at present, approximately?

Mr. GILLOOLY. Taking in the unskilled and skilled workmen, I would say, approximately, in and about the plants of all factories, 85,000.

Mr. BACHARACH. 85,000 men?

Mr. GILLOOLY. Yes.

Mr. OLDFIELD. What paragraph does this come under?

Mr. GILLOOLY. Paragraph 84.

Mr. BACHARACH. Are you acquainted with the difference in price of glass bottles being imported at the present time from Germany or Japan into this country and the price in this country?

Mr. GILLOOLY. No, sir; I am not. I am not in possession of that information. That is, I have no direct information bearing on the wages that are paid there.

Mr. BACHARACH. Not the wages. I am speaking now of the cost.

Mr. GILLOOLY. No, sir; I am not.

Mr. OLDFIELD. What rate do you suggest?

Mr. GILLOOLY. There are various rates for the different classes.

Mr. HAWLEY. Do I understand you to say that one officer of your association is now in Europe making an investigation of the rates of wages paid in this industry and the cost of production?

Mr. GILLOOLY. Yes, sir.

Mr. HAWLEY. When will he be able to report?

Mr. GILLOOLY. I would say that probably he would be able to file a supplemental report with your committee, if agreeable, the latter part of March bearing on the conditions abroad.

We do not believe this committee is in favor of lowering the standard of living that has been attained at such efforts by the American workingman and as advocated by our Government; neither do we believe that you gentlemen would want the American workmen to be obliged to work under the conditions that prevail in some of the foreign countries. If you will peruse the report of Mr. T. W. Rowe, in which he gives a review of his visit to Germany and other foreign countries, you will find that the conditions under which the men employed in the glass industry were obliged to work were not only detrimental to the health of the workers, but repugnant to the American sense of justice. By this I mean the long hours of labor,

low wages, and the further fact that men were obliged to eat and sleep in the factory in which they were employed.

I want to assure this body that the men employed in the American glass industry have done everything possible to assist the manufacturers in meeting this unfair foreign competition. Since we last appeared before this committee pleading for a higher tariff, we have adopted in all departments of our organization, with the exception of the bulb and lamp-chimney departments, the unlimited system of production. This was done that we might in some degree meet the competition complained of by the manufacturers.

We would be more than pleased to file with your committee, at a later date, a supplementary report giving the exact conditions in the industry as they prevail abroad, dealing on wages, conditions, etc. This will be done by Mr. Clarke, the president of our organization, when he returns from abroad.

BRIEF OF FLINT-GLASS WORKERS' UNION, PITTSBURGH, PA.

Paragraph 95. Make new paragraph:

Glass incandescent electric light bulbs and lamps with filaments not otherwise specially provided for in this section, 45 per cent ad valorem.

Glass and glassware pressed or cast in a mold and not produced in combination with any other method of manufacture; plain or figured, crystal or colored but not decorated in any manner except the grinding in of stoppers which will not be considered as decorating.

All of the foregoing not otherwise specially provided for in this section, 45 per cent ad valorem. (New paragraph.)

Lenses of glass crystal or colored, molded, cast, or pressed, unfinished, fire-finished, ground, polished edges or surfaces, made in any form or shape not otherwise specially provided for in this section, 60 per cent ad valorem. (Substitute for 92.)

Glass and glassware, and all articles of every description composed wholly or in chief value of glass; plain or figured, decorated in any manner, cut, engraved, painted, decorated, ornamented, colored, stained, silvered, gilded, etched, sand-blasted, frosted, or painted in any manner or ground. And all articles of every description blown or in part blown and completed by any other process, either made in a mold or by any other method not specially provided for in this section, filled or unfilled, whether their contents be dutiable or free, 60 per cent ad valorem. (Substitute for paragraph 84.)

Paragraph 95. We recommend the removal from this paragraph of all reference to incandescent electric bulbs and lamps and all following which refers to manufactures of glass or paste not specially provided for, etc.

Our reason is that electric bulbs can not be classified with stained or painted windows, and that glass not specially provided for should be covered by special paragraphs.

New paragraph:

All glass or manufactures of glass or paste, or of which glass or paste is the component material of chief value, not specially provided for in this section, 60 per cent ad valorem.

Mr. BACHARACH. In this connection, I would like to put in the record a letter from the George Washington University stating what it costs the students who use laboratory glassware. The statement was made, if you recall, when the bill was before the House, that it cost the students $15, $20, and $25 per year. A statement from the George Washington University indicates that the charge runs from $4 to $8 for the past year—1920. I would like to place that in the record.

WASHINGTON, D. C., *January 8, 1921.*

MY DEAR SIR: In reply to your letter making inquiry as to the average cost per student for laboratory glassware used by him during the course of the year's study I would make the following statement:

For students taking laboratory courses in chemistry we have a laboratory deposit which is intended to cover the value of the apparatus issued to the student and kept by him in his locker during the year. The deposit fee varies according to the laboratory course a student is taking and in different courses is $10, $15, and $20, respectively. At the end of the year the student returns such apparatus as is in acceptable shape and is given credit accordingly. We have found on the average that the cost to the student is about 40 per cent of the deposit fee; that is about $4, $6, or $8, respectively.

I might add that in the chemistry courses there is also a fixed charge for chemicals used, which varies from $10 to $25, according to the course taken. There is a corresponding fixed charge in the laboratory courses in physics, electrical engineering, and zoology, which charges are $10, $10, and $15.

H. L. HODGKINS,
Dean, Department of Arts and Science.

Mr. O'BRIEN. May I make just one statement? In 1919, when Mr. Clarke, our national president, and myself, appeared before your committee, one of the Congressmen in summing up his talk before the House on the bill made the statement that Mr. Clarke and I were the paid agents of the Manufacturers' Association, and we were down here at their solicitation. I want that statement to be denied absolutely. We were here in the interest of the American Flint Glass Workers' Union, and our expenses were paid by our association and not by any manufacturers. Now, that statement has appeared in the records and I don't want it to be left under the impression that I was a paid agent of any manufacturers.

Mr. TREADWAY. You are a practical shop worker, are you not?

Mr. O'BRIEN. Yes, sir.

Mr. TREADWAY. Where are you employed?

Mr. O'BRIEN. By the Vineland Flint Glass Works, Vineland, N. J.

GLASS BOTTLES.

[Paragraphs 83 and 84.]

JAMES MORRISON, REPRESENTING THE NATIONAL BOTTLE MANUFACTURERS' ASSOCIATION, TOLEDO, OHIO.

Mr. MORRISON. My name is James Morrison, of Toledo, Ohio, representing the National Bottle Manufacturers' Association. The National Bottle Manufacturers' Association that I represent is made up of those glass manufacturers who make the ordinary bottles that you see in everyday use, the drug-store bottle, the catsup bottle, and things of that kind, as distinguished from these high-grade cut-glass bottles you find for table use, etc.

We have little to ask. We simply ask—it does not seem much to us, but it might seem more to you gentlemen—a restoration of the 1909 tax which gives certain specific rates, as well as the ad valorem rate. In addition to that, and for the purpose of clarifying and making more clear the distinction between the ordinary bottles that are in everyday use and those that are of the artistic type—the pressed bottle, etc.—we suggest you strike out of the first line of No. 83 in the tariff act the words "or pressed." The ordinary bottle is not a bottle that is pressed. There is one part of the operation

where it is pressed, but there is a following operation that turns it into the completed bottle, and the use of the words "or pressed" tends, I think and we think, to confuse the glass bottles with another glass which is not at all competitive with them, and which I understand will be referred to by a committee of gentlemen representing the other manufacturers.

We would also like to ask that after the word "operations" in the last line the words be added, "and not to include bottles for table use or thermos bottles." The thermos bottle is not a bottle in the sense, I think, as intended by paragraph 83, and should be more properly covered by the bracket, as referred to by the gentleman who preceded me.

Mr. GARNER. What is the consumption in this country of the production of your association?

Mr. MORRISON. I think I have some figures here. Rather than rely on memory I will just quote from them.

The number of employees at normal capacity is 32,000, and the wages of those employees for the year ending August 31, 1920, was $30,000,000. The number of gross of bottles produced per year—that is, the possible production, was 25,000,000 gross, but for the past year ended August 31, 1920, there was actually produced and marketed in this country 21,775,000 gross, at an approximate value of $108,875,000.

Mr. GARNER. What is the importation?

Mr. MORRISON. The importation, except in some particular lines, has not, up to this time, been of serious import.

Mr. GARNER. Could you give it to us in percentages? Of course, we can go to the records of the customhouse and get it, but I did not know but you had it.

Mr. MORRISON. No. I don't know about that. I can say, in the common, ordinary, every-day bottles, up to the present time the importations have amounted, I would say, to not over 5 or 6 per cent.

Mr. GARNER. Has it been that high?

Mr. MORRISON. I would not make that as a positive statement. But the reason, probably, that it has not been higher is because there has always been some tariff to protect against importations.

Now, Mr. Chairman, we have an interest in common with other branches of the glass industry in paragraph No. 573, which permits the importation free of duty of certain glassware when intended for educational institutions. We think that has been very much abused, and we do not think that the reasons for it are so strong as to justify a continuance of that practice. It permits the coming into the country of many articles, among them glass bottles, in which we are interested to a considerable extent, free of duty. We think this country can supply all of them at prices that should be quite satisfactory, and if ever a need existed, we think that need has passed. It does not exist to-day.

BRIEF OF THE NATIONAL BOTTLE MANUFACTURERS' ASSOCIATION.

GENTLEMEN: For your consideration in connection with a proper determination of the tariff on glass bottles and parts accessory thereto, we submit as follows:

We suggest that paragraph 97, schedule B, of the tariff act of 1908, be substituted for paragraph 83 of the tariff act of October 3, 1913, and we ask your consideration of the changes herewith suggested.

Strike out the words "or pressed," in the first line.

The use of these words tends to confuse bottles of the kind apparently intended to be covered by this paragraph with bottles and glassware of other kinds manufactured by a different process and embraced within another paragraph of the tariff act, which will be presented by representatives of the Pressed and Blown Glassware Association.

Add after the word "operations" in the last line the words "and not to include bottles for table use or thermos bottles."

We suggest a new paragraph to follow immediately after the foregoing, as follows:

> Glass bottles, decanters, and glass stoppers complete or partly complete, bottles of every description composed in chief value of glass, ornamented or decorated in any manner, or cut, engraved, painted, decorated, ornamented, colored, stained, silvered, gilded, etched, sand-blasted, frosted, or printed in any manner, or with ground-glass stopper; all of the foregoing not specifically provided for in this section, filled or unfilled, and whether their contents be dutiable or free, 60 per centum ad valorem: *Provided*, That for the purpose of this act bottles with cut-glass stoppers shall, with the stoppers, be deemed entireties.

The above-suggested new paragraph is intended to take the place of paragraph 98, Schedule B, of the tariff act of 1909 (corresponding to paragraph 84, Schedule B, tariff of 1913), so far as it relates to glass bottles.

We submit the above, believing it to be in the interest of a more simple enforcement of the tariff law in this respect, inasmuch as it separates bottles the value of which has been added to by decoration from other articles made in glass. For the information of your committee we give herewith figures bearing upon the size and importance of the industry:

1. Employees:
   - (*a*) Number of employees, at normal capacity, average about.. 32,051
   - (*b*) Wages of employees, year Sept. 1, 1919, to Aug. 31, 1920... $30,000,000
2. Size of industry:
   - (*a*) Capacity, gross of bottles per year..... 25,000,000
   - (*b*) Actual production, year Sept. 1, 1919, to Aug. 31, 1920.... 21,775,000
   - (*c*) Approximate value..... $108,875,000

The glass-bottle industry is laboring under a very heavy increase in the cost of the various materials entering into the manufacture of glass as well as in connection with the labor connected therewith. Herewith we give the figures showing these increases:

Increase in principal cost items, 1913 to 1920.

	Average price.		Increase.
	1913	1920	
MATERIALS.			*Per cent.*
Soda ash.....per cwt..	$0.87	$1.75	207
Sand.....do....	.11½	.25	204
Lime.....do....	.25	.55	120
Fuel oil.....per gallon..	.04	.12	200
Gas coal.....per ton..	1.35	4.50	233
Steam coal.....do....	1.50	4.75	217
Lumber.....per M feet..	15.00	40.00	166⅔
LABOR.			
Skilled labor:			
Cutters			110
Mold makers			100
Blown ware			55
Machine ware—			
Wide mouth			35
Narrow mouth			40
Semiskilled and unskilled, weighted index	100	250	150

JAMES MORRISON.
GEO. S. BACON.
C. P. LEWIS.

We wish to request further that all articles of glass provided for in the above-suggested paragraphs shall not be entitled to free entry under paragraph 573 of the tariff act of October 3, 1913, or any revision which might be made of said paragraph in the new tariff bill.

In connection with this request, we respectfully refer you to the hearings before the Subcommittee on Finance of the United States Senate on bill H. R. 7785.

PLATE GLASS.

[Paragraphs 86, 87, 88, 89, and 90.]

E. S. WHERRETT, REPRESENTING THE PITTSBURGH PLATE GLASS CO., PITTSBURGH, PA.

Mr. WHERRETT. Mr. Chairman and gentlemen, I represent the Pittsburgh Plate Glass Co., and wish to address you on paragraphs 86 to 90, inclusive, but with particular reference to paragraph No. 88, which covers cast, polished, plate glass, finished or unfinished and unsilvered.

The present rates of duty were established against the strong protest of all the domestic manufacturers, and their claims of inadequate protection and harm to the industry were promptly substantiated by the larger and immediate increase in importations which followed the passage of the present bill. For instance, in October, which I believe was the month that the present law became effective, the imports of plate glass into this country trebled those of the previous months. To go a little bit further, in 1912, for the calender year, the imports were 1,000,000 feet. I will not quote the odd figures.

In 1913, January to September, the imports were 1,081,000 square feet. October to December, the three months following the passage of the present law, the importations amounted to 1,115,000 feet.

In 1914, January to June, they were 1,700,000 square feet, and July to December 383,000 square feet.

The small imports during the last half of the year were naturally due to the outbreak of the war, and had this not occurred and caused the almost completed cessation of production of plate glass in Europe importations into this country would undoubtedly have continued to increase, to the serious loss and detriment of the domestic industry.

For the first time in the history of the domestic industry orders from foreign countries were received in sufficient size to be a factor, and the following figures taken from Government reports show the extent of exportations:

From the period from 1915 to 1919, to save your time, there were exportations averaging from 5,000,000 to 7,000,000 square feet.

During 1920 export orders have been vanishing as rapidly as foreign production has increased to supply the markets, and the actual shipments, which have applied largely against old contracts, have probably not exceeded 4,000,000 feet. The final figures are not yet available. In 1915 and 1916 we had hopes that we might be able permanently to retain a reasonable amount of export business, but these hopes have been dissipated by the constantly increasing cost of production and the adverse effect of the exchange situation, until today we are not only unable to meet European manufacturers on equal terms in any of the foreign markets, but are rapidly approaching equally portentous conditions at home.

Mr. GARNER. What is the total product of your firm?

Mr. WHERRETT. The total product is about 35,000,000 feet for this past year.

Mr. GARNER. How much did you export?

Mr. WHERRETT. I have not the figures for last year, but our exports for the years 1915 and 1919 average about 6,000,000 square feet. Some years this represented as high as 80 per cent of the total exports and other years it dropped to as low as 40 per cent.

Mr. GARNER. This past year, 1920, what was your total product?

Mr. WHERRETT. About 35,000,000 feet.

Mr. GARNER. What is the total consumption of the country at this time?

Mr. WHERRETT. About double that.

Mr. GARNER. You really produce more than 50 per cent of the total consumption in this country?

Mr. WHERRETT. Approximately 50 per cent.

Mr. GARNER. What is your main competitor?

Mr. WHERRETT. We have six competitors operating nine plants, I believe.

Mr. GARNER. What is the next largest producer?

Mr. WHERRETT. The Edward Ford Plate Glass Co.

Mr. GARNER. Name the other five.

Mr. WHERRETT. The National Plate Glass Co., the Allegany Plate Glass Co., the Heidenkamp Plate Glass Co., the Standard Plate Glass Co., and the American Plate Glass Co.

Mr. GARNER. Is there any intercorporate relation between those companies?

Mr. WHERRETT. No, sir.

Mr. GARNER. Does your company hold the stock of any of those companies?

Mr. WHERRETT. No, sir.

Mr. GARNER. Your exports during the past year were about 40 per cent of your production?

Mr. WHERRETT. I stated there were some years during the period 1915 and 1919, inclusive, when our share of the total exports was about 40 per cent.

Mr. GARNER. What were they last year?

Mr. WHERRETT. About two and one-half million. The figures are not complete and accurate, but approximately two and one-half million.

Mr. GARNER. About 7 or 8 per cent?

Mr. WHERRETT. That is right.

Mr. GREEN. You say the exports of last October are only about one-half those of previous years?

Mr. WHERRETT. That is what I said. They have been decreasing rapidly, however, and have now reached the vanishing point.

Mr. OLDFIELD. How much are the importations?

Mr. WHERRETT. Those figures are not finally available, but about 2,000,000 feet for the calendar year.

Mr. OLDFIELD. About the same as your exports?

Mr. WHERRETT. That is approximately correct.

Foreign cost: Reliable information shows the present cost of production in Belgium, which is the principal plate-glass producing

and exporting country in Europe, to be 25½ cents per square foot, based upon the present rate of exchange.

Domestic cost: The cost to our company for the year 1920 was 55.85 cents per square foot, including depreciation on the basis approved by the Government, but with nothing added for interest on investment or Federal taxes.

Mr. GREEN. Is that the factory cost?

Mr. WHERRETT. That is the factory cost. This is approximately double the prewar costs, although labor and materials entering into the manufacture of glass have each increased about 180 per cent. The fact that the total cost has not increased in keeping with labor and materials is due to the fact that improvements in the manufacturing process have kept down the cost; that there has been no increase in depreciation and only a moderate increase in general expenses.

Freight rates: The transportation problem, especially with reference to the delivery of glass to the Pacific coast, is another phase of the tariff question which must be taken into account. Plate glass can be transported from Antwerp, Belgium, to any of the Pacific coast cities for several cents per square foot less than the rail cost from our factories. We now pay the railroad in this country about 12 cents per square foot to transport plate glass from the factories to the Pacific coast in carloads. The ocean rates fluctuate, a sthere are no regular sailings from Antwerp, but we estimate the freight advantage in favor of the foreign manufacturer to be about 8 cents per square foot in carload quantities.

Present condition of industry abroad: While the war practically stopped the manufacture of plate glass in France and Belgium, those factories located in the active fighting zones were the only ones that were destroyed, and steps have already been taken to rehabilitate these plants. Notwithstanding the effect of the war, European production during the past quarter of 1920 was at the rate of approximately 50,000,000 square feet per year, and the estimated production for 1921 is about 70,000,000 square feet, which is as large an output as the European factories have ever had in one year.

Present condition of domestic industry: The release of the war restrictions upon the building industry and upon the manufacture of furniture and automobiles contributed to the ensuing feverish activity that created a demand for plate glass which the factories were unable to supply. There was a world shortage which lasted until the late summer of 1920, and which naturally created high prices. This demand consisted very largely of sizes under 5 square feet, which are most largely used in furniture and automobiles. There was no unusual volume of building requiring the larger sizes, so that 65 per cent of the consumption of plate glass in this country for the past year has been in sizes under 5 square feet and 75 per cent in sizes under 10 square feet.

For the purpose of meeting the increased demands of the country and yielding to the importunities of the trade our company reluctantly decided, notwithstanding the exorbitant cost of construction and equipment, to increase the capacity of our plants, and for this purpose will have expended when construction is completed $10,500,000, which will increase the capacity to the extent of 10,000,000 square feet. In this connection European factories have a great advantage, due to the fact that the cost of building and equip-

ping a plate-glass manufacturing plant is less than half the cost of a similar plant here. This is particularly important, as it enables them to turn over their capital much more frequently than can be done by a manufacturer in this country, and also makes their overhead charges and depreciation less than half of what they are with us.

Unfortunately, the length of time required to build a plate-glass factory is so great that no part of our new production was received during the period of shortage. Indeed, if the imports of glass into this country are at all increased, it is entirely probable that we shall have little or no use for this additional glass, for it was not contemplated when these expenditures were approved that we would be unable to retain a large proportion of our export business, which was developed at considerable expense during the war, or that there would be such an early reaction in business activity.

Foreign plate-glass combination: The European manufacturers have, since 1904, been organized into a strong combination, which includes nearly all the continental plate-glass companies, and which not only determines export prices but production as well. This combination, known as the International Glass Convention, ceased to function during the war, but is now in operation. The combination is sanctioned by the Government and has the power, by its virtual control of all the exporting factories, to offset low prices which it may see fit to quote in any market by high prices in markets that are under its own control.

The menace of foreign competition: The imports of plate glass into the United States for 1920 are not indicative of the ability of the foreign manufacturer to sell in this market. As previously explained, there has been a world shortage of glass; the Union Commercial, which sells the major portion of the output of the Belgium factories, has found itself so completely unable to supply the demand that it has been compelled to allot its production among the different countries and among different customers so that the quantities shipped to the United States merely represent this country's pro rata share of the foreign production based on previous purchases. With a languishing demand for glass throughout the world the foreign syndicate will naturally look to this country for relief. This competition from which the American manufacturer is protected by a duty on imports that for the first nine months of this year is equivalent to an ad valorem duty of 13 per cent only, constitutes a serious menace to the industry.

That the foreign manufacturers during the past year have taken full advantage of the exchange situation and of high prices existing as an economic consequence of the shortage, and that because of the enormous advantage resulting from the exchange situation business is most attractive to them at prices far lower than they are quoting in this country is indicated by the following statement of prices received by the Belgian manufacturers on shipments to countries taking more than half their exports. The figures given cover the first 10 months of 1920 and are in francs per square foot:

United States	10.342
Great Britain	4.669
Argentina	4.208
Australia	3.882
Canada	5.558

The inadequacy of the protection afforded by the present low rates is apparent.

Mr. GARNER. What do you consider a healthy competition from abroad?

Mr. WHERRETT. One that would at least give us an equal chance.

Mr. GARNER. But I mean what is a healthy competition in percentages in your industry, for instance?

Mr. WHERRETT. I do not know how you can answer in percentages. I can tell you what the imports have been over a period of years, or what they have averaged.

Mr. GARNER. In producing an article in this country, would 10 per cent foreign importations be a healthy competitive business for the importer or the manufacturer in this country?

Mr. WHERRETT. No; I don't think it would.

Mr. GARNER. Well, if we produce in this country more than 90 per cent of all we consume, and we will not permit the foreigner to come in with 10 per cent or less than 10 per cent of it, how are we going to trade with the balance of the world?

Mr. WHERRETT. I can not answer that, sir. That is not my province.

Mr. GARNER. No; I did not think you could. I was just wondering what on earth they will say when you are coming in with less than 2½ per cent of the product, and you are alarmed for fear you are going to be put out of business if, forsooth, they might increase it to 5 per cent.

Mr. WHERRETT. Bear in mind that the imports of the past year are not indicative of what the foreign manufacturer can do as based upon his cost.

Mr. GARNER. If we adopt a policy in this country of saying to the foreigner, "You can not sell to us, we are putting up a fence here in the form of a tariff law that will prevent you from selling to us. We propose to sell you $8,000,000 per year, but we do not propose to permit you to sell 5 per cent." How are we going to adjust our accounts?

Mr. GREEN. That statement, it seems to me, while I have no doubt Mr. Garner intends to be fair with the witness, to be a sort of catch question. There are a large number of articles of very high value that do not enter into competitive conditions in this country, upon which we probably would not put any tariff at all, or if we did, we would put a very light one, which we will be compelled, under any circumstances, to buy from foreigners. While that does not apply so much to European trade, it does apply to trade elsewhere, so that the European manufacturer will sell, for example, to South America, and a man gets credit there, and the South American will use, possibly, that credit to pay his bills when he sends us coffee or rubber, or something like that, which we can not produce in this country.

Mr. WHERRETT. I would also like to say, if I may, in reply to Mr. Garner, that the American manufacturer has provided a capacity that is sufficient to take care of the normal consumption of the country. Our own company this past year started to expend an appropriation of $10,500,000 to provide for additional capacity to take care of the requirements of the country.

Mr. GARNER. Yes. I imagine that within the next three or four years the exporter in this country is going to ask Mr. Green and

others who make that calculation to add up the books, and it is going to be quite difficult, I am afraid, to do it.

Mr. GREEN. You mean to strike a balance?

Mr. GARNER. To strike a balance between this country and other countries. There is not sufficient gold in the world to pay us for our difference in the imports and exports.

Mr. RAINEY. We will have an excess in South America.

Mr. GARNER. We have got to buy from somebody if we are going to sell all the time. We can not get the gold, and we have got to balance the books by goods. I was just wondering how you are going to do it.

Mr. GREEN. That is all outside of the matter the witness is speaking on. Let us come down to the matter in hand.

Mr. GARNER. This gentleman being an exporter of 40 per cent to 80 per cent of his product, I thought it would interest him to give some consideration to the question of export trade, and I imagine there are many other manufacturers in this country who are producing who are going to consider in the next two or three years the question of continuing to sell their products abroad, and they are going to wonder how they can do that unless they can get goods from abroad instead of gold; and, as I just remarked, there is not enough gold in the world to pay for what we are selling.

Mr. WHERRETT. We did absolutely no export business before the war, and while we should like to maintain it, we have very little hope of being able to do so.

Mr. RAINEY. If you just get a tariff high enough so that you can charge everybody here what you want to, you won't want to go abroad, will you?

Mr. WHERRETT. We will be satisfied with a fair profit, sir.

Manufacturing cost alike on all sizes: While all previous tariffs have provided for a lower duty on smaller sizes than large, and while it has been the custom—exaggerated in this country by the graduated tariff—established in the early days of the industry to quote lower prices on small sizes, it should be clearly understood that the manufacturing cost per square foot is alike on plates of all dimensions. The entire progress of the manufacturing process has been toward the development of large units and toward the casting of larger and larger sheets, until to-day glass is being cast in plates exceeding 400 square feet. These rough plates, after they are cast, are examined for quality and reduced in size to eliminate defects that can be seen. One side is then ground and polished by two operations which are repeated on the other side. There are many defects in the plate which can not be detected in its rough condition which still further reduce the area when the polished surfaces make these defects visible. There is a further reduction in area by unavoidable breakage through the plant, so that the finished product, as it is finally cut in the warehouse in merchantable quality, appears in a great variety of sizes, about 7 per cent of which are under 5 square feet, 16 per cent between 5 and 10 square feet, and 77 per cent over 10 square feet. The concentrated effort of the factories is devoted not to the production of popular sizes, but to the production of the largest possible sheet, in order that it may be cut to advantage to the different sizes demanded by trade. Experience has proven that

plate glass can be manufactured economically only in these large units.

While the development of economical manufacturing has been toward large plates, the growth in the consumption of plate glass has been almost entirely in sizes under 5 square feet, so that to-day 65 per cent of the consumption in this country is under 5 square feet, and 75 per cent is under 10 square feet. This condition will be obvious when consideration is given to the volume of building during the past five years, and to the growth of the automobile and furniture industries, principally the former.

It is apparent, therefore, that sizes, some of them as small as 2 feet in area, which are demanded in such enormous quantities that they can be obtained only by cutting down large glass, should sell for the price of the large glass out of which they are cut, plus the cost of cutting, and that the custom of selling small sizes below the cost (originating in the early days of the industry and perpetuated by the tariff) has been outgrown by commercial development.

The subject of this paragraph has previously been presented during tariff hearings, and to prove the correctness of our contentions a schedule of our present selling prices is attached. This schedule, which has been gradually developed through the war period when we were free from foreign competition, is predicated upon a uniform cost per square foot of all ordinary sizes, aside from unpopular dimensions in small glass which can only be marketed in competition with window glass by selling at less than cost.

It has been contended by those who have been interested in maintaining a low tariff that small sizes are a by-product and cost nothing to manufacture, the theory being that the manufacturer is better off to sell the glass at any price than to throw it away. It will be seen from the brief description of the manufacturing process that small sizes are in no sense a by-product; that they are produced in precisely the same manner as large glass, and that the very nature of the manufacturing process creates plates of all dimensions. The lumber business presents a fair analogy. A pine board 3 inches wide does not command the price of a 12-inch board, but it is not in any sense a by-product. Five, 6, and 7 foot lengths are not called by-products, nor are they thrown away, although they are sold at a lower price than regular lengths. The pith of the matter is that the sizes most difficult to secure should sell for the most money in glass, as in lumber. If the demand for 5 to 7 foot lumber should increase to such an extent that it could be supplied only by cutting up the long lengths the price of the short lengths would at once be adjusted to the price of the long lengths. This is precisely what has happened in the plate-glass business.

Profits of the business: The profits made in the manufacture of plate glass in this country have always been small until the outbreak of the war, when the interference with production in Europe and the subsequent shortage of glass naturally advanced prices, especially on small sizes, thus giving the domestic manufacturers an opportunity for profit not previously experienced. Even during the period of abnormal conditions (1914 to 1920, inclusive) the profits of our company in the manufacture of plate glass, based upon actual investment in that branch of business, has averaged about 14¼ per cent. The

published profits of the Belgian plate-glass manufacturers for the fiscal year ending June 30, 1920, were as follows:

	Capital.	Profits.
	Francs.	*Francs.*
St. Roch	6,800,000	8,078,720
Fleroffe	2,856,500	5,175,627
Moustier	3,750,000	12,725,745
Charleroi	3,000,000	15,544,020
Auvelais	2,000,000	12,310,000

Recommendations: In view of the fact, therefore, that the cost per square foot is the same for producing platt glass of all sizes, that the sale of glass under 5 square feet has gradually increased until it now represents 65 per cent of the entire output, that large sums of money have been invested into new plants, mainly for the purpose of supplying this demand for small glass, it is obvious that there are no premises whatever on which anything but a flat duty on all sizes can be predicated. Uniform tariffs on all sizes have for many years been in effect in Germany, Austria, and Spain, and practically uniform rates in France and Italy. We, therefore, recommend a flat duty on all sizes of 22½ cents per square foot. In making this recommendation we do not ask for the full difference between the domestic and foreign cost, but merely seek sufficient protection to avoid a large importation of small sizes that would completely demoralize the industry in this country. A flat rate at 22½ cents would still permit imports and would more than double the Government revenue. While recognizing that a permanent tariff can not be formulated on the transitory conditions of to-day, yet some immediate and substantial relief must be offered from the conditions with which the industry now is threatened, especially as the conditions which make for a high cost in Belgium to-day will be alleviated sooner than those that place the dollar at such a high premium. While there is no prospect of restoration of normal exchange, there is a certain gradual reduction to be expected from the abnormal high cost of fuel, transportation difficulties, and other items that will greatly lower the foreign cost of production.

The preceding argument has treated of cast polished plate glass, unsilvered, covered in paragraph No. 88 of the existing tariff. All glass covered by paragraphs Nos. 86, 87, 89, and 90 is competitive with the product of the American factories, and the present differential between these paragraphs and paragraph No. 88 should at least be maintained.

D. K. ALBRIGHT, PLATE GLASS MANUFACTURER, GLASSMERE, PA.

Mr. ALBRIGHT. I will refrain from touching on the subject that Mr. Wherrett has just recently directed your attention to, in order to just take a very few minutes of your time.

I am here on behalf of the plate glass manufacturers of America, and am the representative of one of the large plate glass manufacturers. We are here in behalf of a larger and increased tariff, for certain reasons.

To-day a very large percentage of the plate glass manufacturers are closed down. We employ between 8,000 and 10,000 men, possible 1,000 women, aside from our clerical forces.

Just to what extent to-day I am unable to say, but there is a large amount of export glass being unloaded in New York, with our plant closed down. We are asking an increase in the tariff for the reason that we have to compete with Belgian labor. This is the country we refer to, because it is the one that we come in competition with on account of their large production of plate glass.

Mr. OLDFIELD. Is the reason that you are closed down because you can not sell your product at this time?

Mr. ALBRIGHT. Very true.

Mr. OLDFIELD. Is not that true not only in your business but almost every other business in this country, including agriculture? I notice the woolen mills are closed down, the cotton mills are closed down, the Ford plant is closed down, and a great many other automobile establishments. I know in my country farmers can not sell cotton, they can not sell their wheat or their corn, and they can not sell anything, and they have got nothing to buy with unless they can sell their product. Is not that your trouble, rather than the tariff?

Mr. ALBRIGHT. Very true; that is the fact; but I refer to this condition in order to present this condition to your honorable body.

Mr. RAINEY. Factories are closed down or running on half time on account of lack of orders. Is not that the condition over the whole world?

Mr. ALBRIGHT. Very true, that is, but that does not justify the point I made, I should not think, by any means. That glass is coming in here, and more and more is coming into this country, and the more that comes in here the more men we will have out of employment.

Mr. OLDFIELD. I think the people who are buying this glass coming in here now are liable to have it on their hands and not be able to sell it.

Mr. ALBRIGHT. Very well. We will hope for that.

Mr. GARNER. I understand from your statement you would not have any of this glass brought here at all. You would manufacture it all?

Mr. ALBRIGHT. Absolutely not. That is not the case.

Mr. GREEN. Let us let the witness proceed. We have other witnesses to hear.

Mr. ALBRIGHT. I do not believe we have a right to encourage the building of factories abroad and shipping of glass into our country to the detriment of our own country. We have stood throughout the war, I think, 100 per cent patriotic, and to-day we come to you asking for a 25-cent rate—25 cents per square foot on all sizes, because of changes that have taken place in the glass industry in the last few years. The small glass to-day is in as great demand as the larger sizes, and we have to go into the larger sizes and reduce them to supply the demand for small glass. Therefore we are asking your honorable body to have an increase in the tariff to 25 cents per square foot.

Mr. RAINEY. From the standpoint of patriotism the 20,000,000 people in this country who were exceedingly patriotic in this war ought to pay a tax on account of their patriotism, in order to have you make some more money?

Mr. ALBRIGHT. I don't think that question is in order, your honor.

Mr. GREEN. This has nothing to do with the tariff.

Mr. ALBRIGHT. I don't think the question is in order. I can not answer that question.

Mr. RAINEY. I thought you said a while ago you were patriotic, and therefore we ought to give you a chance to make some more money.

Mr. ALBRIGHT. Oh, no; we simply want the protection that we think we are entitled to because of conditions that are facing us.

Mr. RAINEY. Anything that develops a higher tariff is in order now, under this proposition.

BRIEF ON BEHALF OF THE PLATE GLASS INDUSTRY.

This brief applies to paragraphs Nos. 86, 87, 88, 89, and 90 of the Underwood-Simmons bill. The following statements refer specifically to paragraph No. 88, which covers cast polished plate glass, unsilvered. The rates of duty under paragraph No. 88 are as follows:

	Cents.
Plate glass measuring 384 square inches and under, per square foot	6
Plate glass above 384 square inches and not exceeding 720 square inches, per square foot	8
Plate glass above 720 square inches, per square foot	12

The present rates of duty were established against the strong protest of all the manufacturers. The above duties do not give the domestic manufacturer protection against the foreign industry. This was substantiated very shortly after the Underwood-Simmons bill became effective, which was in October, 1913, by the imports of plate glass into this country during the last few months of 1913, which were 1,279,002 square feet, and in the year 1914 were 3,195,947 square feet.

Had the outbreak of the war not caused an almost complete cessation of the production of plate glass in Europe, importations into this country would undoubtedly have continued to increase to the serious loss and detriment of the domestic industry.

EFFECT OF THE WAR ON THE INDUSTRY.

When the war forced an almost complete curtailment of production in Europe, this country became the main source of supply for the world's markets.

EXPORTS.

For the first time in the history of the domestic industry we received orders from foreign countries for approximately 30,000,000 square feet of glass, which was exported from 1915 to the end of the year 1919. These figures are taken from Government reports. Figures for the year 1920 are not complete, but they will show a material reduction from the previous years on account of the plants in foreign countries resuming operations during the years 1919 and 1920. The domestic manufacturers were living in hopes that they would be able to retain a large portion of this export business in the years to come, but on account of their increasing costs and the lower costs of the foreign manufacturers, we have been compelled to allow this business to be taken by the foreign manufacturers, as the domestic manufacturers were not able to meet the strong competition.

CONDITIONS OF DOMESTIC INDUSTRY.

Following the signing of the armistice business was temporarily depressed, but early in the year 1919 activity had developed to such an extent that there was an unusual demand for plate glass in this country. This was brought about particularly by the automobile and furniture trades of this country. The large demand from these two industries, and also the increased demand from other lines in this country, caused a natural shortage for the year 1919 and up to the middle part of 1920.

For the purpose of meeting the increased demands of this country, the undersigned manufacturers decided, notwithstanding the exorbitant costs of construction and equipment, to increase the capacity of their plants, and for these

purposes will have expended during the years 1919, 1920, and 1921 from $5,000,000 to $8,000,000. This enlargement is not yet productive and, in view of the present state of business, in all probability will not be required.

Another item of great importance to the manufacturers of this country is the large demand for glass under 5 square feet. The development of the automobile and furniture trade forces the manufacturers to furnish them with 65 to 75 per cent of their production under 10 square feet. You understand that in manufacturing plate glass that a large majority of this small glass is cut from the large sheet in its original form. You can realize this reduces the value of the large plate, but it is necessary for the manufacturers to do this to take care of our home industries, which require the large amount of small sized plates.

FOREIGN AND DOMESTIC COSTS.

Reliable information shows the present cost of production of foreign manufacturers, and especially of Belgium, which is the principal plate-glass producing and exporting country of Europe, to be 25½ cents per square foot, based on present rate of exchange.

The average cost of the undersigned for 1920 was 61.88 cents per square foot, and this is approximately double the prewar cost, although labor and materials entering into the manufacture of glass have increased up to as high as 200 per cent.

FREIGHT RATES.

The transportation problem with reference to delivery of plate glass in this country is another phase of the tariff question which must be taken into account. For example, we give you the approximate figures: Plate glass can be imported from Antwerp, Belgium, to any of the Pacific coast cities for 4 cents per square foot in any quantity. Based on our present railroad rates, we now pay 12 to 14 cents per square foot to transport glass from our factories to the Pacific coast in carload lots.

LOCATION OF INDUSTRIES.

The location of the undersigned industries are practically all in towns which are solely dependent upon these plants. The undersigned employ in the neighborhood of 4,500 men, and a large majority of them own their homes in these towns.

RECOMMENDATIONS.

Considering that the cost is the same for producing glass of all sizes and that the sale of glass under 5 square feet has gradually increased, and on account of the uniform tariff on all sizes that has been in effect in various foreign countries covering plate glass, we, therefore, recommend a protective tariff on all sizes of plate glass of 25 cents per square foot.

You understand, in asking the above flat rate of 25 cents per square-foot duty, we do not want to stop the importation of glass into this country, but we do want to be put on an equal competitive basis that will allow us to operate our plants.

The preceding argument has treated of cast polished plate glass, unsilvered, covered in paragraph No. 88 of the existing tariff. All glass covered by paragraphs Nos. 86, 87, 89, and 90 is competitive with the product of the American factories and the present differential between these paragraphs and paragraph No. 88 should at least be maintained.

AMERICAN PLATE GLASS CO.,
Kane, Pa.

THE NATIONAL PLATE GLASS CO.,
Detroit, Mich.

THE EDWARD FORD PLATE GLASS CO.,
Rossford, Ohio.

ALLEGHENY PLATE GLASS CO.,
Glassmere, Pa.

HEIDENKAMP PLATE GLASS CO.,
Springdale, Pa.

STANDARD PLATE GLASS CO.,
Butler, Pa.

ROLLED GLASS.

[Paragraphs 87, 88, and 90.]

C. J. GUNDLACH, OF THE MISSISSIPPI GLASS CO., NEW YORK CITY.

Mr. GUNDLACH. Mr. Chairman and gentlemen of the Ways and Means Committee, on behalf of the rolled-glass industry, which I represent, who are deeply interested in the schedules you are undertaking to revise, we wish at the outset to assure you of our loyal cooperation in the business before you. We have unbounded faith in this committee giving due consideration and recognition to the changes that we recommend in the brief that we beg to submit.

BRIEF ON BEHALF OF THE ROLLED-GLASS AND WIRE-GLASS INDUSTRY.

The companies presenting this petition represent an industry that has grown in the past 20 years to large proportions, including, as it does, the production of a great variety of types of rolled glass and analagous in many ways to what is known as the plate-glass industry.

The rolled-glass industry includes the general forms of glass known as rough or cast, ribbed, fluted, a variety of obscured glass used largely in partitions in offices and buildings, prism glass used for the diffusion of light, and the wire-glass industry, a development of recent years. Wire glass is made in all forms of rolled glass, including obscured glass. In the past 10 or 12 years there has been developed a large business in polished wire glass, which is used in the higher grade of office buildings and other places where fire protection is necessary and, at the same time, the highest grade of glass is required.

The older forms of rolled glass are the cheapest product of the said glass factories, while the obscured glass and wire glass, and especially polished wire glass, have a greater cost of manufacture.

The exceptional risks of fire in this country need no detailed reference in this petition, but they add an element of peculiar importance to the manufacture of wire glass and its development as an industry in this country, as wire glass has a great value as a fire retardant.

The manufacturers referred to in this petition have absolutely no business connections of any kind and are, in the strictest sense, competitive among themselves and are also, in a measure, competitive with window glass manufacturers and plate glass manufacturers, all of whom are in the field to supply glass for skylights, vertical openings, and partitions in buildings.

PRESENT TARIFF DUTIES.

The industry of rolled glass is included in the customs tariff now in force in the general classification of "plate glass," under Schedule B, paragraphs 87, 88, and 90.

Schedule B, paragraph 87, provides as follows:

"Fluted, rolled, ribbed, or rough plate glass, or the same containing a wire netting within itself, not including crown, cylinder, or common window glass, not exceeding three hundred and eighty-four square inches, ¼ cent per square foot; all above that, 1 cent per square foot; and all fluted, rolled, ribbed, or rough plate glass, weighing over one hundred pounds per one hundred square feet, shall pay an additional duty on the excess at the same rates herein imposed: *Provided*, That all of the above plate glass, when ground, smoothed, or otherwise obscured, shall be subject to the same rate of duty as cast polished plate glass unsilvered."

This is a material reduction from the Payne-Aldrich law, which provided as follows:

	Cents per square foot.
Not exceeding 384 square inches	½
Not exceeding 720 inches	1½
Above 720 square inches	1½

this applying to the glass per square foot and also excess over 100 pounds per 100 square feet dutiable at the same rate.

CHANGE RECOMMENDED.

We recommend that Schedule B, earths, earthenware, and glassware, paragraph 87 of 1913 tariff law, be changed to the following:

Plate glass, fluted, rolled, ribbed, rough or obscured glass or the same containing a wire netting within itself (excess of 1 pound per square foot dutiable at the same rate for each additional pound or fraction thereof):

	Cents per square foot.
Not exceeding 384 square inches	1½
Exceeding 384 square inches	3

PRESENT TARIFF DUTIES.

Schedule B, paragraph 88, of the present law provides as follows:

"Cast polished plate glass, finished or unfinished and unsilvered, or the same containing a wire netting within itself, not exceeding three hundred and eighty-four square inches, 6 cents per square foot; above that, and not exceeding seven hundred and twenty square inches, 8 cents per square foot; all above that 12 cents per square foot."

This was a reduction from the Payne-Aldrich law of from 4 cents to 10½ cents per square foot.

CHANGE RECOMMENDED.

We beg to recommend for your consideration, in lieu of Schedule B, paragraph 88, the following paragraph referring to polished wire glass specifically in distinction from polished plate glass:

Cast polished plate glass containing a wire netting within itself:	Cents.
Not exceeding 384 square inches ..... per square foot	18
Above that and not exceeding 720 square inches ..... do	20
All above that ..... do	22

We are of the opinion that the above clause should be inserted in the new tariff, making it apply only to what is known as "polished wire glass," which, having a wire netting embedded within itself, is manufactured by a slightly different process from polished plate glass, and that a separate paragraph covering "the plain plate-glass industry" should be inserted.

PRESENT TARIFF DUTIES.

Schedule B, paragraph 90: We recommend no change as far as our industry is concerned.

REASONS FOR RECOMMENDATIONS.

The present rates do not afford adequate protection to enable us to continue at or near present wage scales nor to market our product in competition with imported glass. At the time the present tariff was enacted the protection afforded by it "on plate glass, fluted, ribbed, rolled, or rough, or the same containing a wire netting within itself," according to Government figures was about 25.33 per cent ad valorem duty. (See Rept. 60, Miscellaneous Series, Department of Commerce, entitled "The Glass Industry Report on Cost of Production of Glass in the United States," published by the Government Printing Office at Washington in 1917, Table 128, p. 369.) Since the date of that report the cost of manufacture of these kinds of glass has increased 200 per cent. Consequently a rate of duty which represented an ad valorem rate of 25.33 per cent in 1914 at the present day represents an ad valorem duty of less than 9 per cent, the duty being based specifically on the superficial measurement and the weight of the glass, and having no reference to the cost or market price.

A duty which amounts to less than 9 per cent ad valorem upon this form of glass does not protect and can not protect the rolled-glass industry from destructive competition by the rolled-glass industries of Belgium, France, England, Germany, Austria, and Japan, and under the prevailing low rate of exchange such a duty is no protection at all.

The matter of ocean freight rates from Europe upon such heavy articles as glass play an important part in the question of protection by duty, as the freight rates on such articles are always low, and in many cases such articles

are taken as ballast. The ocean freight rates from Europe upon glass are, in most cases, much less than railroad freight rates upon the same article from points distant only 150 miles from New York and other seaboard cities where the largest markets for these kinds of glass exist.

Upon the present schedule of railroad freight rates the average cost of glass delivered in New York City or other near-by seaboard cities from Pittsburgh or factories in that vicinity, where most of these products are produced, amounts to between 1½ cents and 2 cents per foot. On the present ocean freight rates from Europe the cost does not exceed 1 cent per foot—an advantage in favor of the European manufacturer of from one-half cent to 1 cent per foot.

ROLLED GLASS INDUSTRY AND ITS GROWTH.

The original plant for the manufacture of rough rolled glass was started sometime in the seventies in Lenox, Mass. From this time the industry has developed so that at the present time there are nine manufacturers engaged in it. The number of men employed is approximately 2,500. The volume of business during the past year amounted to about $13,000,000. All of the rolled-glass plants in this country, with the exception of one located in St. Louis, Mo., are situated in small towns, on account of the ability to secure natural gas and raw materials in close proximity. The closing of any of these plants would bring especial hardship to the labor employed in the industry, owing to the fact that in the small towns in which these factories are located there is little, if any, other employment which can be obtained. In most of these towns the rolled-glass factories are the principal source of employment.

The developments in the progress of the building industry have in recent years increased the demand for the forms of glass referred to in this petition; the ever-increasing use of what is known as steel sash and hollow-iron metal sash, causing ever greater wall area of buildings to be inclosed with glass instead of solid construction, has produced an increased demand for these types of glass in all types of building construction.

Wire glass, especially in large cities, has grown in great demand for terminal stations, buildings, elevator shafts, factory buildings, and, in fact, buildings of every description wherever there would be danger to human life by the breaking of glass, produced by fire, explosion, or any other cause, on account of its nonshatterable characteristic. It has been approved, and its use insisted upon, by fire underwriters, architects, and engineers throughout the United States, who recognize its merits and value as a fire retardant, as well as in the respect above referred to. Its great merit has been demonstrated in several conflagrations and explosions. Its use is constantly increasing, and the industry in the past few years has shown a constant and steady growth.

DOMESTIC PRODUCTION COSTS.

The average cost of ¼-inch rolled, rough, ribbed, or obscured, glass, without wire netting inserted, is approximately 9½ cents per foot at the factory.

The average present cost of ¼-inch rolled, rough, ribbed, or obscured glass, containing wire netting within itself, is approximately 16 cents per square foot at the factory.

Of the above costs, labor—taking into consideration the labor in the production of raw materials used in the manufacture of glass—amounts to over 50 per cent of the total cost.

This cost of production in 1920, as compared with the cost of production in 1914, shows an increase of over 200 per cent. The following are some of the increases in costs:

	Per cent.
Melting sand	269
Soda ash	274
Limestone	230
Labor:	
Common labor	250
Ladlers	207
Batch mixers	198
Machine tenders	225
Cutters	179
Furnace chargers	225

Making an average increase in labor of about 211 per cent.

FOREIGN COMPETITION.

There are a large number of glass factories engaged in the production of rolled glass of the kind and description produced by your petitioners, which are located in England, Belgium, France, Germany, Austria, and Japan. The factories in these countries are all located within easy reach of ocean transportation.

Cost of raw materials.—The cost of raw materials which enter into the manufacture of these products in these countries we have been unable to definitely ascertain. Prior to 1914 the costs of these materials were in all cases lower than the costs in the United States, and we do not see any reason why they should not be correspondingly lower at this time, as labor enters very largely into the production of these raw materials.

Labor.—We have been definitely informed that the rate of wage of unskilled labor in Belgium and France is 125 francs per week; that in England it is about the equivalent of 10 per cent higher. This cost, based upon the present rate of exchange, is the equivalent of about $8 per week in the United States. For this class of labor in the United States your petitioners are obliged to pay at the present time about $30 per week. Skilled labor, both in the foreign countries above referred to and in the United States, receive wages at about the same proportionate increase above those paid for unskilled labor. Assuming that the labor cost in Belgium, France, and England of the manufactured product is the same proportion as in the United States, the labor cost per foot of ¼-inch glass would be about 1½ cents per foot; of ¼-inch glass with wire netting within itself it would be about 2¾ cents per foot; making a difference in favor of the European cost in the labor item alone upon the ¼-inch glass of 3 cents per foot, and on the ¼-inch glass with the wire netting within itself of 5¾ cents per foot.

In addition to this the foreign manufacturer has the advantage of ½ cent to 1 cent per foot in his freight rates to Atlantic seaboard cities in the United States over railroad freight rates of the United States from your petitioners' factories to Atlantic seaboard points. This, added to the difference in wages, makes a total difference in the foreign manufacturers' favor on ¼-inch glass of 3½ cents per foot and on the ¼-inch glass with the wire netting within itself of 6¾ cents.

The freight differential to points on the Pacific coast gives an even greater advantage in favor of the foreign manufacturer. The freight rate from your petitioners' factories to those points amounts on ¼-inch glass to not less than 10 cents per foot. The ocean freight to those points from foreign ports we believe amounts to not over 3 cents per square foot.

The difference referred to above of 3½ cents and 6¾ cents in favor of the foreign manufacturer is about what the duty would amount to provided by the tariff schedules which the petitioners are requesting be substituted for the present schedules.

Competition.—As an example of the competition which your petitioners are required to meet, the following illustration is given: Belgian manufacturers of rolled glass have shipped to New York City within the last month about 50,000 or 60,000 feet of ¼-inch rolled ribbed glass, which is now upon the docks in New York City and which has been purchased by a New York dealer for consumption. Prior to the purchase by this dealer, this same glass had been offered to others in the Atlantic coast section as low as 7½ cents per square foot f. o. b. Antwerp. The cost of this glass delivered in New York, duty paid, would not exceed, we believe, at that price, 9 cents per square foot. The cost delivered at Atlantic seaboard cities of similar glass made by your petitioners would be approximately 10½ cents.

Dumping, sources of imports, etc.—We believe that under the present low rates of exchange the foreign manufacturers, and especially Belgian, French, and English manufacturers, are preparing to ship large quantities of their surplus products of this kind of glass to the United States. One of the large French manufacturers has made an offer of 1,500,000 feet of ⅛-inch rolled ribbed or rough glass to one of the manufacturers named in this petition at 8¾ cents per square foot f. o. b. Havre, France. The freight and duty paid on this glass, on sizes less than 384 square inches, is equivalent to about 2½ cents per foot, making the total cost delivered to Atlantic seaboard cities in the United States about 11 cents. The cost to your petitioners of glass delivered to Atlantic seaboard cities is approximately 12½ cents. At the time this offer was made by the foreign manufacturer he stated that this was surplus

glass which they wanted to dispose of and that the United States was the available market in which to dispose of it.

Your petitioners, in recommending the revision of the present tariff schedules and the increasing of the tariff duties to the rates hereinbefore recommended, have had in mind only the difference in cost of manufacture, and especially the difference in the costs of labor entering into such manufacture, and have recommended only such an increase as will place the foreign manufacturer upon the same basis as your petitioners in competing in the markets in the United States.

Advance Glass Co., Newark, Ohio; Gray & Son Glass Co., Falls Creek, Pa.; Highland Glass Co., Washington, Pa.; Mississippi Glass Co., Mississippi Wire Glass Co., New York; Pennsylvania Wire Glass Co., Philadelphia, Pa.; Sergeant Glass Co., Sergeant, Pa.; South Western Sheet Glass Co., Okmulgee, Okla.; Western Glass Co., Streator, Ill.; Wissmach Glass Co., Paden City, W. Va.

Mr. GARNER. How much were the importations last year?

Mr. GUNDLACH. Practically nothing, sir, to amount to anything. Of course, there has not been any glass imported to any extent in the last four or five years during the war.

Mr. GARNER. What were the importations in 1912?

Mr. GUNDLACH. This matter came up so hurriedly that we did not know until a very few days ago that we have not a lot of data that we would like to have produced here; but I want to say in answer to that, sir, that prior to 1912 or 1913 there was an appreciable amount coming to this country, but since that and since the war there have been a lot of factories that have been erected in Belgium, some more in France, some in Japan, that are now seeking the markets.

Mr. GREEN. Is not your fuel cost less than the cost of fuel over there?

Mr. GUNDLACH. No; not at the present time.

Mr. GREEN. Well, we export a good deal of this glass, do we not?

Mr. GUNDLACH. Not to Europe. The only glass we exported to Europe was during the time of the war, when we shipped great quantities for the Government.

Mr. GREEN. We export a good deal to South American countries of common window glass.

Mr. GUNDLACH. Yes, sir; we did while they could not get it from abroad.

Mr. GREEN. We are exporting a good deal right now?

Mr. GUNDLACH. That has been ordered, and a great many of the orders have been canceled with us. We had some orders that they could not cancel because they could not get into operation on the other side.

Mr. GARNER. Let us get at the situation with reference to the last two years. Since the armistice you have had opportunities of shipping from these various countries that you speak of, probably with the exception of Austria, things that would come into this country?

Mr. GUNDLACH. Yes, sir.

Mr. GARNER. Your present tariff rate is about one-fourth of what you are now asking Congress to enact?

Mr. GUNDLACH. It is coming in now. I am trying to tell you that.

Mr. GARNER. I asked you a moment ago what the volume was and you said appreciably nothing.

Mr. GUNDLACH. Well, during the time of the war I am speaking of. Of course, since the armistice a great many of these plants resur-

rected over there, and quite a number of new ones have been put up in addition, and there was a scarcity of glass there, and some of the plants destroyed, and a lot of them have gone into this business.

Mr. GARNER. What was the volume of imports during the first nine months of 1920?

Mr. GUNDLACH. It could not have been very much, Mr. Congressman. They did not have it to ship over. It is coming now.

Mr. GARNER. What you are asking now is in anticipation of what is likely to come?

Mr. GUNDLACH. Exactly. We have it before us right now. I am trying to put it to you, sir.

Mr. RAINEY. How many men are employed in this country in this industry?

Mr. GUNDLACH. About 2,500.

Mr. RAINEY. In the entire industry in the United States?

Mr. GUNDLACH. Yes, sir.

Mr. RAINEY. What wages do you pay?

Mr. GUNDLACH. I would like to go into that and give you the comparative costs on this side and the other side. I want to say what we pay our common labor to-day is around $30 per week as against $8 in France and Belgium. It is 10 per cent higher in England. In Japan the rate of pay to common labor is between 30 and 40 yen, which is $15 to $20 per month.

Mr. RAINEY. Are your laborers organized in unions?

Mr. GUNDLACH. No.

Mr. RAINEY. Your industry is a small-town industry. You take it out in the country.

Mr. GUNDLACH. We go where there is raw material in close proximity to natural gas or coal, which is very necessary.

Mr. RAINEY. And because you can get labor cheaper you do not butt up against organizations?

Mr. GUNDLACH. We have not been able to get labor cheaper. We have one plant at Morgantown, W. Va., where there has been a scarcity of labor and where we are paying higher rates than we are in the Pittsburgh section.

I had a cable Friday of this last week that unskilled labor in Belgium and France is 125 francs per week. In England it is 10 per cent higher. Japan would be considerably less.

Mr. RAINEY. You do not have skilled labor?

Mr. GUNDLACH. Yes, sir; we do.

Mr. RAINEY. You do not have glass blowers, do you?

Mr. GUNDLACH. No. We have rollers, men in charge of the furnaces and lehrs, cutters, and experienced packers.

Mr. RAINEY. You make it by machine?

Mr. GUNDLACH. Roll it by machinery; yes, sir. The labor on the rollers range all the way from $30 to $60 and $70.

I would like to call attention to this competition. There is at the present time, or there was a few days ago, 177 cases of this glass at the dock which came in on the steamship *Kuhnland* in New York. We had over 1,500,000 feet offered to us at less than we can put it into any Atlantic seaboard port.

WINDOW GLASS.

[Paragraph 90.]

J. M. NEENAN, REPRESENTING THE NATIONAL WINDOW GLASS WORKERS, CLEVELAND, OHIO.

Mr. NEENAN read the following statement to the committee:

I desire to state, Mr. Chairman and gentlemen of the committee, that I represent the members of the National Window Glass Workers as president. The men who are members of this association are employed in the window-glass industry as blowers, gatherers, flatteners, and cutters. During the past two months a condition giving cause for alarm has developed in the window-glass markets of this country. Window glass in large volume has been imported and orders for further amounts have been placed in Belgium. As proof of what is taking place in this direction I wish to bring to your attention an article printed in the Brussels, Belgium, issue of Le Bon Conseil, under date of December 12, 1920, which is captioned "A lucky turn for our glass factories," and reads as follows:

"We have previously received news that a big export firm of Charlerol has obtained an order from the United States for 50,000 boxes of window glass and that another order of the same import is to follow, to be distributed among other firms. We have just learned that an American firm has placed the balance of the order with the Charlerol firm for 65,000 boxes. As this firm already had an order placed a month ago for 25,000 boxes from the same buyer, these orders make a total of 140,000 boxes or 7,000,000 feet of window glass."

We have reason to expect, Mr. Chairman, because of our knowledge of conditions in Belgium, that this sort of thing will continue, to the detriment of all who are concerned in the window-glass industry of this country, unless tariff rates covering the difference in costs of production between this country and Belgium are placed in effect at the earliest possible moment. The Belgian manufacturer possesses an advantage in labor costs which can not be overcome by the American manufacturer, among the reasons for this being that factories are operated continuously in Belgium, no rest being taken on Sunday. Female labor is also employed in unskilled and semiskilled occupations. Men are employed in similar occupations in this country. The difference in labor costs in these occupations represents a considerable item of advantage to the Belgian manufacturer.

The principal advantage possessed by the Belgian manufacturer, however, rests in the cheapness, comparatively speaking, of skilled labor. The skilled trades employed in Belgium consist of the blower, the first gatherer, the second gatherer, the flattener, and the cutter. The blower and gatherers work nine hours per day, and produce 90 cylinders in that time. The following wage rates apply: Blowers, 24 centimes per cylinder plus 90 per cent plus 20 per cent; first gatherer, 65 per cent as much as blower; second gatherer, 60 per cent as much as first gatherer. The flattener receives 8 centimes per cylinder flattened plus 140 per cent for first quality, and 8 centimes plus 130 per cent for second quality, and the same basic rate plus 115 per cent and 100 per cent for third and fourth quality, respectively. Cutters receive 55 per cent as much as blowers. As previously stated, factories in Belgium are operated continuously. Blowers, gatherers, and flatteners are employed in three shifts, working nine hours each and 24 shifts per month. The flattener will flatten approximately 225 cylinders per day.

There is a difference between the working methods effective in this country and Belgium. Second gatherers are not employed in this country. Instead of second gatherers, snappers are employed as assistants to blowers and gatherers. The snapper is not a member of our union. He has organized a union which, for the most part, is conducted independently of ours. In the matter of wages, however, committees of snappers act with our committee when we meet the manufacturers' wage committee for the purpose of formulating a wage agreement. The snappers at present receive 45 per cent as much as blowers. Our wage scale is based on what we refer to as teh bracket system. We are paid according to the size and quality of glass cut from the cylinders we blow after they are flattened. Our wage rates graduate upwards from the first bracket which includes sizes from 8 by 10 to 10 by 15 to sizes larger than 30 by 41.

One of the provisions of our wage scale specifies that a monthly statement of production, which gives the amount of glass cut in each bracket, the quality of the glass and the amount earned by each blower shall be forwarded to our national headquarters by each manufacturer. The secretaries of our locals also forward a duplicate of the statements issued weekly by the manufacturers to our members in their employ to headquarters. By means of these statements we are able to keep an accurate record of glass made and wages earned by our members.

Blowers and gatherers work 40 hours per week or 160 hours per month. We produce at the rate of 9 cylinders per hour, or a total of 1,440 cylinders per month. We produce per blower an average of approximately 208 boxes each of 100 square feet per month for which the blower has received during the past working season $1.45 per box. In this amount there is included 10 per cent differential advance in which the other trades do not participate. The gatherer, snapper, and flattener receive 80 per cent, 45 per cent, and 27 per cent, respectively, as much as this amount less the 10 per cent differential. The cutter receives $0.531 per box and he cuts approximately 160 sheets per day. A flattener will flatten in one day the cylinders produced by four blowers.

With the above as a basis for our calculations we find that the skilled trades employed in this country and Belgium receive the following amounts as wages per month:

Belgian wages, based on present exchange rates:	
Blowers	$78.85
First gatherer	48.00
Second gatherer	28.80
Flattener, second quality	61.92
Cutter	40.62
American wages:	
Blowers, 208 boxes at $1.45	301.60
Gatherer, 80 per cent of $1.32 times 208 boxes	219.64
Flattener, 27 per cent of $1.32 times 832 boxes	296.52
Cutter, 520 boxes, at $0.531	265.72
Snappers, 45 per cent of $1.32 times 208 boxes	128.55

It will be seen from the above that a wide discrepancy exists between the labor costs applying in this country and Belgium. We can not meet the competition of the Belgian workmen nor do we wish to try to meet it. We have no desire to work on Sunday or to see female labor employed in factories where we are employed and for these reasons we ask that a tariff rate covering the difference in production costs be established in order that the men employed in the window glass industry of this country may find it possible to produce the window glass needed in this country.

It may be thought that wage rates applying in this country are exorbitant and that the skilled workmen have gone to extremes in demanding wage rates out of proportion to services given. In this connection, Mr. Chairman, I wish to call your attention to the fact that before a man is competent to work at any of the skilled trades he must serve a long and arduous term as an apprentice. In the case of those who learn the trade of blowing, it is essential that the trade of gathering be learned first. I also wish you to know that our trades are seasonal. We can not very well work at our trades during the summer months because of the extreme heat of the factories and the unhealthfulness of our occupations. Ordinarily, market demands are such that it is not necessary for us to do so. An exceptional demand was in evidence during the past spring and summer, however, and in order to assist in producing the glass the country needed we extended our wage scale from May 13 to June 3 and from September 1 to August 11. Our wage scale terminates on the 15th of the present month. Approximately 45 per cent of the plants we expected would continue until that date are out of operation. Glass that we should be making in these factories is being brought from Belgium. We have at no time been able to work more than six and one-half or seven months per year. When wages are considered from the viewpoint of men who can work but six and one-half to seven months per year, it can quite readily be understood that they are not at all out of proportion.

We are confident that if you make inquiry into the matter we have brought to your attention you will find that a considerable amount of glass has been brought to this country and landed at different ports along the Pacific and Atlantic coasts and at such prices that it is absolutely impossible for the

American manufacturer and workmen to meet the competition forced upon them. There should be an immediate revision of the Underwood tariff bill, and the rates now effective should be increased to a point that will prevent the Belgian manufacturers from undermining the American industry. Establish a tariff rate that will give the American manufacturer and worker equal chance with the Belgian manufacturer and worker and we will not fear their competition. We can produce glass in as good quality as it can be produced in Belgium or any other country, but we can not produce it as cheap, and I trust I have made plain the reasons why we can not do so.

THE NATIONAL WINDOW GLASS WORKERS,
J. M. NEENAN, *President.*
HERBERT THOMAS, *Executive Member.*

Mr. HULL. What is the value or the amount of glass turned out by one man per day here as compared with Belgium?

Mr. NEENAN. The American blower will earn approximately $12 per day and the Belgian man will earn about $3 per day.

Mr. HULL. Does the Belgian turn out more?

Mr. NEENAN. He turns out more glass. He produces 90 cylinders a day. We produce on an average of about 63.

Mr. HULL. So the labor is more efficient over there than it is here?

Mr. NEENAN. No; it is not more efficient, but they work longer hours. They work nine hours and we work on an average of about seven.

Mr. HULL. I noticed that they established an 8-hour basis in virtually every country, every commercial country in Europe, not only Germany. Has not there been any effort along that line in Belgium?

Mr. NEENAN. That was not done in the window-glass industry in Belgium. I do not know what they have done in the other industries in Belgium. After the armistice was signed and the factories were placed in operation they did not work on Sundays, but only for a short time. They started to work on Sundays again.

Mr. HULL. Your comparison of the amount received by Belgian laborers per day is in the dollar value of the Belgian product and not in the number of francs he receives?

Mr. NEENAN. No; it is on the basis of the present exchange rate.

Mr. TILSON. Is the operation you do the same as is done in Belgium?

Mr. NEENAN. Practically the same.

Mr. TILSON. And still the Belgian blower can blow more cylinders a day than you can?

Mr. NEENAN. Yes. He works longer hours, and he makes one cylinder per hour more than we do.

Mr. TILSON. What is the reason for that?

Mr. NEENAN. Well, the reason for it is that he is satisfied to work under conditions that we are not satisfied to work under.

Mr. TILSON. I know; but take the same number of hours employed, can an American workman blow as many cylinders per hour actually engaged as the Belgian blower?

Mr. NEENAN. There is this to be taken into consideration with reference to that question. The Belgian single-strength glass is not as heavy as ours. We make heavier glass. Our glass will average about 19 ounces per square foot, and the Belgian, I believe, averages about 16 ounces per square foot.

Mr. TILSON. Then, to that extent, the operation is not exactly the same.

Mr. NEENAN. To that extent. While he is blowing that same cylinder he is not lifting as much weight as we do; perhaps not working quite as hard.

Mr. TILSON. It is unusual to have it said that any foreign workman can produce more in a given time than an American workman. It attracted my attention, that is all.

Mr. NEENAN. I believe there is a misunderstanding about that to a very great extent. I believe in a number of industries the workmen really do produce more per hour than we do.

Mr. RAINEY. The reason for that is the limitation by the unions as to what you can produce.

Mr. NEENAN. The reason for it is this, I believe the foreign workman has never had the opportunity to improve his conditions that perhaps we have had in this country.

Mr. RAINEY. You mean to say the more you improve your condition the less you produce?

Mr. NEENAN. No; we do not take that position, but we do take the position that we ought to have time, after we have produced nine cylinders, to walk to a window and try to get a breath of fresh air. Understand, while the men are producing these nine cylinders they are up against a furnace. They are breathing air that is not good.

Mr. RAINEY. Is there a particular regulation fixing the amount a laborer can produce?

Mr. NEENAN. We have a regulation in our wage scale providing for the making of 9 per hour single strength. We have regulations on certain sizes, however, permitting us to make 10 per hour single strength.

Mr. RAINEY. Is that a regulation the union has established?

Mr. NEENAN. Yes, sir.

Mr. RAINEY. Then, the result of this organization or union is really to reduce the output per man, and that is the reason why you are inferior, apparently inefficient, as compared with the foreign workman?

Mr. NEENAN. I would not say that. They are accustomed in this country to produce single-strength glass heavier than it is produced in Belgium. We could not produce 10 single-strength cylinders per hour of that weight.

Mr. RAINEY. If we put up this tariff some more so as to give you some more protection, some higher wages, is there any danger of still further limiting the production per hour?

Mr. NEENAN. The limiting rate per hour has been in effect for more than 35 years.

Mr. RAINEY. Ever since the tariff has been on?

Mr. NEENAN. No, sir. Ever since the organization was formed and before that time. I believe the window-glass manufacturers will admit that it is a physical impossibility for a man to produce more than 9 rollers per hour of single-strength glass in this country.

Mr. RAINEY. They do it in Belgium, you say?

Mr. NEENAN. They do it in Belgium because they produce a lighter grade of glass. They could not do it with the single-strength glass we produce in this country.

Mr. GARNER. Suppose the Belgium rate of exchange were normal, what would be the wage rate?

Mr. NEENAN. If the rate of exchange were normal, the Belgian would be earning something like $225 a month.

Mr. GARNER. As compared with the American earning what?

Mr. NEENAN. $301; something like that.

Mr. GARNER. Then there is about one-third—a little less than one-third, over 30 per cent—more in wages paid in this country in this industry than there is in Belgium?

Mr. NEENAN. At that rate there would be about 50 per cent. That would be an earning of over $300.

Mr. GARNER. As against $225.

Mr. NEENAN. As against about that; yes.

Mr. HULL. How much have wages in your industry been increased in this country since the war commenced?

Mr. NEENAN. About 50 per cent.

Mr. RAINEY. Has there been any reduction recently in wages at all in your industry?

Mr. NEENAN. No. The wage scale we are working under now was established about a year ago, and it terminates, as I said, on the 15th of this month. We have been negotiating with the manufacturers wage committee but have not been able to effect a settlement for the ensuing year.

Mr. RAINEY. In Belgium they work by the piece?

Mr. NEENAN. Yes; they work by the cylinder.

Mr. RAINEY. Your organization would not be willing to work by the piece?

Mr. NEENAN. We would be very glad to do it. We have not been able to get the manufacturers to agree with us on that.

Mr. GARNER. If you worked by the piece you might produce more than 9 cylinders a day.

Mr. NEENAN. I do not think we could do it.

Mr. RAINEY. You said a while ago that you limited production.

Mr. NEENAN. I did not say we limited production. I said we established the rate of 9 per hour because it is a physical impossibility for us to make more than 9 rollers per hour.

Mr. GARNER. Why is it you would rather do it by the piece than by the day if you are not going to produce more than 9 an hour?

Mr. NEENAN. Because, under the present system we are not paid until the glass we blow in the factory is flattened and cut. If we were paid by the piece the blower would know every day after his work is finished just exactly the amount of money he had earned. We have to stand the loss from breakage on the part of the flattener or the roller boy, or shove boy. We would get away from that loss.

Mr. RAINEY. Do they come back and charge you up with the losses?

Mr. NEENAN. The glass is broken on its way to the cutting room. There is naturally a shrinkage there that we have to stand for. That is the American practice.

Mr. RAINEY. So, would they pay you by the day?

Mr. NEENAN. No; by the square foot; by the box.

Mr. RAINEY. I do not see why that is not working by the piece.

Mr. NEENAN. It is not. The manufacturer agrees with us on that. We will appreciate your efforts very much. I would be glad to have the privilege of filing a brief.

The CHAIRMAN. Very well.

Mr. TREADWAY. Will you tell how many are employed in your industry?

Mr. NEENAN. The number of our association totals about 4,700.

Mr. TREADWAY. They are all agreed with you as to the merits of a protective tariff?

Mr. NEENAN. Yes, sir; I think so.

H. R. HILTON, REPRESENTING THE ALLEGANY WINDOW GLASS CO. AND THE NATIONAL ASSOCIATION OF WINDOW GLASS MANUFACTURERS, PORT ALLEGANY, PA.

Mr. HILTON. Mr. Chairman and members of the committee, when the Underwood tariff was formulated in 1919 the scale was based on the face value of the Belgian franc. Belgium was practically our only competitor at that time, and is to-day. Soon after or just before the war, in 1914, the first importations began under the Underwood tariff bill, and just before the war broke out, in July, 1914, the first importation of over 100,000 was under way. However, only one-half of that was shipped. The war put an end to it. And so we have been protected under the Underwood tariff bill by the war and the consequences of the war up to the present year.

The Underwood tariff bill did not give us the protection it was designed to give the first six months it was in operation and since the war. The war, you know, went right through the glass factory the very first thing and disabled them, and now they are reestablishing themselves and have started producing again. They are now commencing to export glass into our country, as already stated.

We find this condition places us in this position, that we are not able to start our hand glass factories again until we get some relief from this reduction in price that has recently been made, that Mr. Neenan has spoken of.

To show you just the position we are in, the cost of a box of 8 by 10 window glass, the smallest size, laid down in New York by the American factory, is $4.87. The cost of a Belgium box laid down in New York, freight all paid, is $2.98.

Mr. GREEN. How many sheets in a box?

Mr. HILTON. It makes 50 square feet. It varies with the size. Fifty square feet in each box. Take the larger size, 24 by 36, which contains 864 square inches; the cost of American glass in New York is $5.75 and the cost of the Belgian glass in New York is $4.15. That makes an average of about $1.74 per box difference between the Belgium price and our price in New York.

Mr. WATSON. Does the trade favor Belgium glass?

Mr. GREEN. You are not giving us your factory cost. You are giving us the prices.

Mr. HILTON. The factory price in New York to-day is practically the same. With some of the factories it is higher than that price. That is, the price we are selling under now was established in August, 1918, over two years ago. Our cost increased 60 cents per box between the first half of this year and the last half of this year.

Mr. GREEN. What caused that increase?

Mr. HILTON. The main increase came in the price of coal and in the price of natural gas. Our fuel was the main cost. And, also in the cost of our unskilled labor.

Mr. GREEN. Gas and coal have gone down somewhat, have they not?

Mr. HILTON. It has gone down in the last months, but we are all about through with the last six months' work. We did not get any benefit from the reduction. The most of the coal has to be bought ahead. You can not buy it from day to day, and we had to buy the very high-priced coal while we were operating during those last six months, and that is one cause of it. Then take the freight rates. The freight rates from Antwerp to New York are 25 cents, and from Pittsburgh to New York they are 38 cents. The rate from Antwerp to San Francisco is 72 cents, and from Pittsburgh to San Francisco is $1.92. The price of a box of 8 by 10 size glass in San Francisco, Belgium glass, is $3.49, and American glass, $6.01, making a difference of $2.52.

On the 24 by 36 size the difference is $5.35 for Belgium glass and $7.49 for American glass, making a difference of $2.14.

Mr. HULL. How much has your production cost increased since the war began?

Mr. HILTON. The cost of production?

Mr. HULL. Yes.

Mr. HILTON. Oh, it has more than doubled—a good deal.

Mr. HULL. More than doubled?

Mr. HILTON. Oh, yes.

Mr. HULL. Do you expect it to continue on that level for an indefinite length of time?

Mr. HILTON. Increasing our cost?

Mr. HULL. Where the cost has doubled. Do you expect it to continue?

Mr. HILTON. We can not reduce it very much. We do not expect it to go any higher. It would not go any higher, because we would have to stop. In fact, if Belgium is permitted to bring glass in here all the hand plants are through now, except the few in the new gas fields that have just been started up.

Mr. GREEN. Where is your factory?

Mr. HILTON. It is in Port Allegany, Pa.

Mr. GREEN. Which way does the principal part of your product go?

Mr. HILTON. To New York City.

Mr. GREEN. Most of it is not used there, is it?

Mr. HILTON. Yes; it is nearly all used in New York and vicinity. There are a great many other factories shipping to New York, that city being the largest consumer of window glass in the United States; that is, New York and the territory around about there.

Mr. GREEN. That do what?

Mr. HILTON. I say New York and the territory around about it are the largest consumers of window glass that we have in the United States. There are a good many factories all over the eastern half of the United States that ship their product to New York. Of course, it is a large distributing center for the immediate country around about. Philadelphia is another, Baltimore is another, and so on. Chicago is the second largest consumer.

Mr. GREEN. Who supplies the western territory with glass?

Mr. HILTON. Factories in Oklahoma and Kansas, and some in Texas and Arkansas.

Mr. GREEN. How is the Chicago market supplied?

Mr. HILTON. Mostly from West Virginia and Ohio and Indiana.

Mr. GREEN. They would not be bothered so much by this foreign competition as you would?

Mr. HILTON. The Belgians can deliver this glass in Chicago—right in the center of the United States—away below our cost.

Mr. GREEN. This item of New York freight would not enter into the consideration with them?

Mr. HILTON. Well, they can pay—you see they have got over $2 margin. They can pay the freight from New York to Chicago, or from New Orleans to Chicago, and still have a big margin left.

Mr. GREEN. What I mean is the freight from where their factory is located to Chicago at least would not be any more than a man from New York?

Mr. HILTON. There are no factories near Chicago, that is, nearer than 100 miles to it. There are no factories in Chicago.

Mr. GREEN. In giving your figures, you have added in the freight from your factory to New York.

Mr. HILTON. Yes.

Mr. GREEN. That is something that these other factories would not need to take into consideration.

Mr. HILTON. No. But they would pay the freight from Antwerp to New York, which is less than our rate from Port Allegany into New York.

Mr. GREEN. No; but you don't understand. When the foreign exporter puts glass in the United States at New York, if it went any further than New York, these factories would not need to consider this item that you have given in your case, of freight to New York; that is, the railroad freight.

Mr. HILTON. No; they would not. But even if it did not cost the American glass factories any freight to Chicago and the imported glass paid freight New York to Chicago, the importer would still have a large margin with which to undersell the American product.

Mr. GREEN. How do you explain that?

Mr. HILTON. Because of the low cost of exchange. One dollar of American money buys $3 worth of glass over there, and the franc——

Mr. GREEN. No; I am talking about our shipping glass out of this district now.

Mr. HILTON. Well, I do not know that there is very much being shipped out. There is a little going out to South America and the far-away countries, and some over to Canada, but there is no one trying to find any market there now, because the Belgian glass is just coming on the market. They have just got themselves in a position to export, and they only use 5 per cent of their own production at home, and 95 per cent is made for export, and they are the exporters for the world, and they make the cheapest glass of any country in the world.

Mr. GREEN. Their labor costs may be lower than ours, but they are somewhat at a disadvantage as regards fuel, are they not?

Mr. HILTON. Yes. They have some disadvantage there, but on all their other material they have an advantage.

Mr. TIMBERLAKE. I would like to ask you if the American manufacturer does not have the advantage over the Belgian manufacturer

in the use of their product by reason of the quality of the glass being a little better than the Belgian product?

Mr. HILTON. I don't think that would make so much difference. The price controls when prices are up as they are to-day—that is, everything abnormally high—the price is the controlling factor, and if the buyers can get a concession in the price they will take lighter glass.

Mr. GREEN. Is that all?

Mr. HILTON. I believe that is all that I have to say. I just want to add this thought: We see no way to start up our factories unless our tariff can be based on the full value of the franc. I don't know how that can be accomplished, whether through your Treasury Department or how, but it would take that to give us the protection that we got then, that we need to-day, in order to operate our plants.

Mr. GARNER. In other words, if we had the normal value of exchange between this country and Belgium, you could start up your factory?

Mr. HILTON. Yes.

Mr. GARNER. Then you have sufficient protection under the present law?

Mr. HILTON. Yes.

Mr. Chairman, I just want to correct one statement I made. I am a little hard of hearing. I did not understand this gentleman's question. I understand now that he asked me if the present tariff would not give us sufficient protection, whether we could start up our factories, and I said yes. I should have said no, because it won't, unless we get three times as much. I thought he meant if that was based on the face value of the franc.

OPTICAL GLASS.

[Paragraphs 91, 92, 93, 94, and 573.]

HARVEY N. OTT, OF THE SPENCER LENS CO., BUFFALO, N. Y.

Mr. BACHARACH. Will you tell the committee, Mr. Ott, what commodity you are interested in?

Mr. OTT. I am a member of the Spencer Lens Co., of Buffalo, and I am here particularly interested in the optical glass question, and I have a brief which I want to leave with you, but there are two or three points which I want to stress to you a little further. That is the fact that the foreign optical glass concerns increased their facilities during the war very greatly, and very naturally they are looking now for a place to unload it, and they have been coming to this country with prices which, with their years of experience and their organization, etc., we, as a new industry, are not able to meet. No optical glass was made in this country before the war, and it is an entirely new industry that we have developed here. It is one of the infant industries, and it is something that has taken a lot of work and a lot of investigation and a lot of hard knocks. We have succeeded, so far as quality is concerned, in making as good optical glass as we were ever able to import. We have not been able to make it at prices at which we can compete with the foreign glass as it is now coming in.

Two years ago we imported something like $217,000 worth of optical glass. During the first 10 months of 1920 we imported $817,000 worth of optical glass. We ourselves made and sold, including what we used, perhaps $125,000 worth of optical glass. But as the year advanced and as more and more of the European competition was felt, our business has correspondingly dropped off. We must have some protection in this optical glass. You know how serious the condition was during the war. You have not forgotten that during the war you people sent out a call for field glasses, opera glasses, and spy glasses and everything else, because we did not have the optical glass in this country.

Then, too, we have made only the high-grade optical glass. I mean the glass that goes into telescopes, photographic lenses, and microscopes, and that sort of optical instruments.

Connected with the optical glass, if I may be pardoned to divert just a little bit from the glass onto the optical instruments, it is very patent that there is no use of making optical glass in this country unless we have some means of disposing of it; in other words, putting it in the optical instrument. Nobody cares for optical glass as optical glass. In order to market it, it must be marketed as an optical instrument in some way, and there again we are met by a very serious foreign competition. Many of the high-grade German scientific-apparatus factories, optical-glass factories, as you know, before the war had developed a large business, had devoted a large portion of their business, to making war instruments. One factory in Germany, back as far as 10 years ago, had some 20,000 field glasses stored up in their vaults against that day that they talked about. Now all that has been cut off. They are seeking a chance to keep their factory and their people busy in making optical instruments and scientific instruments also, along more nearly commercial lines, such as can be used in everyday life, and they are coming over here and coming fast with a tremendous amount of this apparatus at prices with which we can not compete. I have the data, the details in the brief, and will not worry you with that. They are able to do this because, in the first place, their wages are very much lower than ours. A month ago the factory manager of one of our largest competitors in Germany visited us in Buffalo, and he told me that they were paying skilled mechanics 400 marks a week. Well, 400 marks a week at the present value of the mark, which ranges anywhere from a cent and a third to a cent and a half, will make that man getting anywhere from $5 to $6 a week, as against our skilled workmen that we pay from $35 to $40 a week. Of course, this rate of exchange we are all hoping will be better, and it won't be as bad in the future, but that is the condition we are facing now, and the same thing is true of all of our scientific apparatus. The industries of our country, our Army and Navy, the commercial industries, all of the industries of our country, are hinging on this to such a serious extent that I hope in this new tariff you may see fit to give us protection.

Mr. GARNER. You are now producing, if I get your remark, about 12 per cent of the consumption in this country?

Mr. OTT. Yes, sir. I should say that, offhand.

Mr. GARNER. You would not want to exclude entirely the foreign trade in optical glass?

Mr. OTT. No; I would not.

Mr. GARNER. What would you consider a proper percentage for this country to produce as compared with the consumption?

Mr. OTT. That depends upon how you look at it. In the optical-glass business, the optical glass alone, if we are not protected so that we can provide for a large proportion of that, we shall have to quit entirely, because it is only a small industry in itself.

Mr. GARNER. Your industry was quite important during the war?

Mr. OTT. Yes, sir.

Mr. GARNER. And we had to go into the manufacture of it in order to get out field glasses, did we not?

Mr. OTT. That is the only way we could get them; yes, sir.

Mr. GARNER. If this company produced 50 per cent of the ordinary consumption in time of peace, would that be sufficient to take care of war necessities in case of war?

Mr. OTT. In case of war we should have to very materially increase our facilities.

Mr. GARNER. Yes; but if we had facilities in this country in which you were producing 50 per cent of the consumption in peace time, you probably could meet the war necessities by increasing your plant in case of war?

Mr. OTT. Probably. We would have to increase the plant.

Mr. GARNER. At the present time you are only manufacturing about 12 per cent of it, and, according to your evidence, unless you are given some protection against German importations you will entirely go out of business, and it will be like it was before the war?

Mr. OTT. We will have to. We can not stand it.

Mr. OLDFIELD. What rate of duty do you suggest?

Mr. OTT. Forty-five per cent, I think, will take care of it.

Mr. OLDFIELD. It is 35 now?

Mr. OTT. No. There is no duty on optical glass. Optical glass comes in here free.

Mr. GREEN. How many men are employed in your industry?

Mr. OTT. In the optical-glass industry, about 75. In our optical-instrument industry, about 400.

Mr. GREEN. Seventy-five firms or 75 men?

Mr. OTT. Men and girls—men and women.

Mr. RAINEY. When you speak of optical glass, do you include the glass that goes into spectacles?

Mr. OTT. No. I am glad you brought that up. As I say, we manufacture only the glass for photographic lenses, microscopes, telescopes, and such instruments as that. Other firms, such as the Pittsburgh Plate Glass Co. and the Corning Glass Co., are manufacturing spectacle glass; Bausch & Lomb also.

Mr. RAINEY. It should apply also to that?

Mr. OTT. Yes, sir.

Mr. RAINEY. How many men are employed in that industry, did you say?

Mr. OTT. I could only make a guess at it. In general, I should say probably there are ten men in that industry where we have one. That is a quantity production.

Mr. RAINEY. About 750 in that industry?

Mr. OTT. I should say so.

Mr. RAINEY. In both that industry and your industry—that is, your industry and the industry making spectacle glasses—there are less than a thousand men employed in the United States?

Mr. OTT. That would be my guess.

Mr. RAINEY. How many men do you suppose use eyeglasses?

Mr. OTT. I presume there is one in five, on a guess.

Mr. RAINEY. Then probably 25,000,000 of them use eyeglasses and spectacles?

Mr. OTT. Yes, sir.

Mr. RAINEY. In order to benefit 800 men you want an increase of perhaps 35 per cent on glass. Don't you think that is rather placing a tax against the interests of this country?

Mr. OTT. That is not the point.

Mr. RAINEY. It is not a question of whether that is the point or not, but that follows as a result of your presentation.

Mr. GREEN. Do you think it would make any difference to the consumer?

Mr. OTT. No; it would not, because you pay from $5 to $10 for a pair of glasses, and the glass in that pair of glasses is worth about 7 cents.

Mr. RAINEY. Who is going to get stuck in this operation, between the manufacturer and the consumer, in the increased price? Who is going to have to bear the burden?

Mr. OTT. It is a matter of labor, and not of glass, you know, in producing the spectacle lenses.

Mr. RAINEY. The proposition is that you want to benefit 800 men working in this industry?

Mr. OTT. No; not necessarily. The expense of spectacle lenses is not in the glass itself. It is in the labor.

Mr. HAWLEY. As I understand the proposition, it is that you make all optical glass except spectacle glass?

Mr. OTT. Yes, sir.

Mr. HAWLEY. The principal part of the price paid by the person in buying spectacles is the work done on them after it leaves your hands?

Mr. OTT. Yes, sir.

Mr. RAINEY. Who is going to get hit under this proposition?

Mr. OTT. If we stop making this glass? You mean if we stop making this optical glass?

Mr. RAINEY. Who is going to get hit under the tariff?

Mr. GREEN. I should think that the man who sold the spectacles would need to get about 2 cents more for his material, on that rate.

Mr. OTT. That is all.

Mr. GARNER. So that the glass itself in an ordinary pair of spectacles would cost not exceeding 10 cents, would you say?

Mr. OTT. Not exceeding 10 cents.

Mr. GARNER. You go to an oculist and he charges you $10 for a prescription, and the eyeglass manufacturer charges you $10 for making the spectacles. You pay $20 and the raw material used in making those glasses costs about 10 cents.

Mr. OTT. That is about right.

Mr. GARNER. Of course, the ultimate consumer is going to fight that.

Mr. HAWLEY. In the Bacharach bill we propose a certain rate of duty on your goods.

Mr. OTT. Yes, sir.

Mr. HAWLEY. Are you satisfied with that rate?

Mr. OTT. Yes, sir; I think so, although conditions are worse now than they were then.

Mr. HAWLEY. That is what I was going to inquire about, the developments since that time still lead you to believe that the rate of duty fixed in that bill is satisfactory?

Mr. OTT. I should think so; yes, sir.

I want to say for the Corning Glass Co. that they have developed some special colored glass for aviation and submarine work, and similar work, which if we had not had this colored glass we were at sixes and sevens during the war, and that industry should be taken care of, along with this regular optical glass.

BRIEF OF THE SPENCER LENS CO., BUFFALO, N. Y.

GENTLEMEN: Aside from any verbal testimony which our representative may give before your honorable body, we beg leave to present in writing some of the more important reasons why optical glass and the instruments into which it enters as an integral part should have better protection than heretofore. What we may have to say of optical instruments is equally true of scientific instruments in general.

The following may be in some instances a repetition of our testimony before your body last spring on bill H. R. 7785 and hearings before Finance Committee of Senate. No need of repeating the prophesies made then of the influx of foreign-made (particularly German) instruments, for the predictions are already being fulfilled; and the present rate of exchange has permitted instruments coming in at rates we did not then think possible.

The importance of optical glass in our national welfare can not be better emphasized than to recall the plight we were in during the first months of the war because of lack of it and our inability to produce it in sufficient quantity and quality. The plea sent broadcast to our people for their telescopes, field glasses, photo lenses, etc., illustrated our helpless condition.

Because of the limited demand and the extreme difficulties in the manufacture of optical glass, but few firms the world over have attempted its manufacture. Before the war we were dependent upon a foreign supply. Now we are making it ourselves and are making a quality equal to any. We are also in position to easily increase our output to meet any demand.

The European countries are now trying to find a market for their increased capacities and are sending glass to this country at prices with which we can not compete on the present no-duty basis. We must have protection in the form of a reasonable duty (45 per cent ad valorem suggested), or we must lapse to our prewar dependency on outside sources and court the danger of serious consequences should we become involved in war again.

We have found it difficult to get recent price lists directly from the European makers. In some cases we have found out the prices at which some European glasses have been sold in this country. See following tabulation:

	Per pound.	
	Prices Spencer Lens Co.	Paid European sources.
Medium flint	$2.50	$1.00
Barium flint	3.25	2.00
Dense barium crown	4.25	3.25

In general, as nearly as we can determine, European prices now range from 40 to 70 per cent of our prices. Often European jobbers secure a job lot of

glass on which they make special prices. Under date of December 10 we received the following prices from a London jobber. We tabulate them below with our own:

	Per pound.	
	Spencer lens prices.	London prices.
Light flint	$2.50	$1.30
Dense flint	4.50	[1] 2.25—1.10
Light barium flint	3.25	1.30
Boro-silicate crown	4.00	1.25
Ordinary crown	2.50	.82

[1] Two different makers represented.

Obviously we can not hope to export much optical glass. Just as obviously there will be no regular demand for optical glass in the United States if it is not consumed in the manufacture of optical instruments. Optical instruments will not be made to a large extent in our own country unless they, too, are given a greater protection than now exists. In most instances optical instruments are of a scientific nature, in some instances purely technical, demonstrating certain of nature's laws, but in many more instances of great practical value in our national defense, and in our commercial, hygienic, and economic life. The same is true of many other scientific instruments which are not optical. If we are to insure our national integrity and prosperity we must be self-sufficient along these lines.

Even more than is the case with the optical glass, the foreign nations—Germany in particular—are looking for a market for these scientific instruments. Before the war many factories were busy mostly in making war instruments for the German Government, with economic scientific instruments of secondary importance. Now that demand is cut off they are turning their facilities, which were greatly increased by the war, into the making of instruments of an economic nature, hoping to keep busy, flooding the world with their output.

So far as the United States is concerned, as heretofore, they are destined to have a comparatively easy time, irrespective of any duty, however high, if they shall still be allowed to send their apparatus to our school and college laboratories free of the duty. Statitsics show that more than half of the apparatus imported has gone duty free to the college laboratories at prices with which we can not compete, paying wages on the American scale. For the lesser "half" on which the duty is paid there is not sufficient demand to encourage manufacturing on our quantity basis. Result: Nothing done. We have followed along in Germany's footsteps, whereas we should be leading.

Our commercial activities, particularly along the more technical and better-paying lines, have not been what they should because of the lack of scientific apparatus and scientific research which would permit us to keep up with foreign competition, much less forge ahead. From now on our national defense and our commercial success will be measured by our scientific attainments, and these attainments are not going to exceed those of the foreigner if we depend upon him for the scientific apparatus.

We therefore ask for a duty (45 per cent ad valorem) on scientific apparatus. We also request still more emphatically the elimination of paragraph 573 of the tariff act of October 3, 1913, which is as follows:

"573. Philosophical and scientific apparatus, utensils, instruments, and preparations, including bottles and boxes containing the same, specially imported in good faith for the use and by order of any society or institution incorporated or established solely for religious, philosophical, educational, scientific, or literary purposes, or for the encouragement of the fine arts, or for the use and by order of any college, academy, school, or seminary of learning in the United States, or any State or public library, and not for sale, and articles solely for experimental purposes, when imported by any society or institution of the character herein described, subject to such regulations as the Secretary of the Treasury shall prescribe."

With this paragraph still in force, no duty, however high, will save the apparatus industry. The industry itself is not large. The trade reports show it small, but the other industries are so dependent upon it that it is vital to our national defense and commercial prestige.

Just as we have succeeded with the optical glass, so we have succeeded in making of excellent quality many of the more technical optical and other scientific instruments which we did not make before the war. We have been able to do this because of the stimulus and protection brought about by the war. Now that our markets are open to the foreign competition, with an exchange rate far worse than before the war, we can not hope to continue even with the old—much less the new—instruments without the protection asked for.

The following are a few specific examples met with in our own particular line. The manufacturers of physical apparatus and chemical glassware can give you many, many more:

In September we quoted our regular net price of $118.80 to one of our State universities on 30 of one of our standard microscopes. We were told that one of our German competitors had offered a competitive instrument at $105, duty free; that we could have the order at that price if we would accept it. We declined. They have just received the German instruments.

The German firm above mentioned quoted a western university in November $198.25, duty free, on an instrument on which our net school price is $284.40.

In another instance they quoted $3.30, duty free, net, for microscope objectives for which we charge $5.85.

Within a month one of the dealers with whom we have a good business received an offer of a microscope for $85 in Germany. Our nearest competing instrument would cost him net $134.40. The German instrument laid down in United States would cost about $110.

A refractometer—developed since the war—which we have sold at $335 less 10 per cent is now in competition with a German instrument, duty paid, $288; duty free, $220.

The following tabulations are taken from the latest price list of Carl Zeiss, dated April 8, 1920, in which the prices were made in United States currency. The two microscope stands and the optical parts are as nearly identical as two different manufacturers would make them.

Article.	German list.		Spencer Lens Co.	
	Duty free.	Plus 45 per cent duty.	List.	Less 10 per cent to schools.
Large microscope stand	$128.00	$185.60	$192.50	$173.25
Smaller binoculars	63.00	91.35	71.50	64.35
Microscope stand, hand microscopes	4.25	6.26	9.50	8.55
Eyepieces	1.85	2.68	2.50	2.25
16 mm. objective	6.00	8.70	8.50	7.65
4 mm. objective	11.00	15.95	13.00	11.70
1.8 mm. objective	33.00	47.85	42.00	37.80
Condenser	6.00	8.70	12.00	10.80
Nose piece	5.80	8.41	9.00	8.10
Complete microscope made up of parts starred above	184.05	266.96	279.50	251.55

This data clearly shows that we are not dealing with theory, or what might happen, but with stubborn facts which are "happening" now, every day, and which we must face.

Again may we urge the vital importance of scientific instruments to our national defense, our national progress, our public health, and commercial prestige; and withal, the necessity of a proper tariff.

We again beg to call your attention to the fact that no tariff, however high, will accomplish what we must have for our own national safety if the greater part of the scientific apparatus used is allowed to enter our country on a duty-free basis. With the earnest request that first, and above all, you provide against any duty-free entry we beg to submit the following schedule for your consideration:

> Optical glass in any and all forms, or glass for use in the manufacture of optical instruments, spectacles and eyeglasses, or for any other optical purposes, white or colored, 45 per cent ad valorem.
>
> Spectacles, eyeglasses, goggles, magnifiers, and readers, and frames for the same, or parts thereof, finished or unfinished, 45 per cent ad valorem.

Lenses of glass or pebble, molded or pressed, or ground and polished to a spherical, cylindrical or prismatic form, and ground and polished plano or coquille glasses, wholly or partly manufactured, 45 per cent ad valorem.

Opera and field glasses, and frames for the same, or parts thereof, wholly or partly manufactured, not otherwise provided for, 45 per cent ad valorem.

Surveying instruments, telescopes, microscopes, photographic and projection lenses, and frames or mountings for the same, or parts thereof, wholly or partly manufactured, and all other optical instruments and appliances of any and all kinds, all the foregoing not otherwise provided for, 45 per cent ad valorem.

Parabolic and mangin mirrors, for searchlight reflectors, and mirrors for optical, dental, or surgical purposes, wholly or partly manufactured; strips of glass not more than 3 inches wide, ground or polished on one or both sides to a cylindrical or prismatic form, including those used in the construction of gauges, and glass slides for magic lanterns, 45 per cent ad valorem.

Range finders, gun, bore, rifle, and turret sights, periscopes, and all other optical instruments for military purposes, and frames for the same, or parts thereof, finished or unfinished, wholly or partly manufactured, 45 per cent ad valorem.

Optical measuring instruments, refractometers, saccharimeters, colorimeters, spectrometers, and other testing instruments for ophthalmological purposes and frames or mountings for the same, or parts thereof, finished or unfinished, wholly or partly manufactured, 45 per cent ad valorem.

Glassware and porcelain ware, laboratory apparatus and other apparatus, and appliances wholly or in part of glass or porcelain, for use in the sciences or in analyzing or testing or for use in education, 60 per cent ad valorem.

Philosophical, scientific, and laboratory apparatus, utensils, instruments, and appliances and parts thereof, finished or unfinished, and preparations, including bottles and boxes, containing the same, not otherwise provided for, 45 per cent ad valorem.

Surgical and dental instruments, or parts thereof, made wholly or in part of iron, steel, copper, brass, nickel, aluminum, or other metal, finished or unfinished, 60 per cent ad valorem.

Trusting that the foregoing may be of some material help to you, and assuring you of our desire to aid in any way possible, we are,

H. N. OTT, *President*.

BRIEF OF THE AMERICAN OPTICAL CO., SOUTHBRIDGE, MASS.

This brief is presented on behalf of the spectacle and eyeglass industry of the United States by the American Optical Co., of Southbridge, Mass., manufacturers of spectacles, eyeglasses, eyeglass and spectacle lenses, and appliances and supplies required by opticians and optometrists.

Following are the items and paragraphs in which we are interested, together with present and past duties:

91. "Spectacles, eyeglasses, and goggles, and frames for the same, or parts thereof, finished or unfinished, 35 per centum ad valorem."

This was paragraph 105 of the act of 1909, reading:

"Spectacles, eyeglasses, and goggles, and frames for the same, or parts thereof, finished or unfinished, valued at not over 40 cents per dozen, 20 cents per dozen and 15 per centum ad valorem; valued at over 40 cents per dozen and not over $1.50 per dozen, 45 cents per dozen and 20 per centum ad valorem; valued at over $1.50 per dozen, 50 per centum ad valorem."

92. "Lenses of glass or pebble, molded or pressed, or ground and polished to a spherical, cylindrical, or prismatic form, and ground and polished plano or coquill glasses, wholly or partly manufactured, strips of glass not more than three inches wide, ground or polished on one or both sides to a cylindrical or prismatic form, including those used in the construction of gauges, and glass slides for magic lanterns, 25 per centum ad valorem."

This was paragraph 106 of the act of 1909, reading: "Lenses of glass or pebble, molded or pressed, or ground and polished to a spherical, cylindrical, or prismatic form, and ground and polished plano or coquill glasses, wholly or partly manufactured, with the edges unground, 45 per centum ad valorem;

if with their edges ground or beveled, 10 cents per dozen pairs and 45 per centum ad valorem."

Also paragraph 107 of the act of 1909, reading: "Strips of glass, not more than three inches wide, ground or polished on one or both sides to a cylindrical or prismatic form, including those used in the construction of gauges, and glass slides for magic lanterns, 45 per centum ad valorem."

93. "Opera and field glasses, optical instruments and frames and mountings for the same; all the foregoing not specially provided for in this section, 35 per centum ad valorem."

This was paragraph 108 of the act of 1909, reading:

"Opera and field glasses, * * * and optical instruments, and frames or mountings for the same; all the foregoing not specially provided for in this section, 45 per centum ad valorem."

94. "Surveying instruments, telescopes, microscopes, photographic and projection lenses, and frames and mountings for the same, 25 per centum ad valorem."

This was paragraph 108 of the act of 1909, reading: "* * * Telescopes, microscopes, photographic and projection lenses * * * and frames or mountings for the same; all the foregoing not specially provided for in this section, 45 per centum ad valorem."

CHANGES IN DUTY RECOMMENDED.

It is impossible to ascertain an adequate duty on these schedules, as on any other schedules in the tariff bill, unless it is understood on what basis the duty is to be levied and collected. Under present prevailing rates of exchange any tariff based on a collection of duty on the foreign valuations would be worthless, for the reason that the rates of exchange would practically annul any ordinary tariff duty that could be levied.

It is understood that one of the problems of the present tariff will be the establishment of some standard of levying and collecting the tariff that will have a tendency to at least equalize the cost of production between our goods and those of foreign manufacture, and that probably the only workable basis that can be arrived at is some form of valuation on the goods at their American values and not at the foreign values, so that our own goods will have a chance at least of competing in our own market with foreign produced wares.

Another matter of importance that we understand is being considered by the Government is the necessity of getting some form of immediate relief while a more studied and permanent tariff bill is being worked out to prevent the loading down of our warehouses with foreign-produced goods before a new tariff bill is enacted.

Any recommendations that we could make, therefore, are necessarily dependent upon the basis on which the tariff is to be levied and collected. Under normal conditions the rates of the 1909 act were certainly not excessive.

Under normal conditions it has been shown by the census reports that the imports of these schedules are responsive to tariff legislation. There was a large jump in the importation when the 1913 act went into effect, which was only slowed up by the coming of the war, and since the armistice there has been a tremendous increase in importation, even above the prewar figures. These figures may be verified by reference to Monthly Summary of the Foreign Commerce of the United States, furnished by the Department of Commerce, Bureau of Foreign and Domestic Commerce.

The imports of optical instruments, including lenses and spectacles, for 1912 were $649,996; for 1913, $778,011; dropping during the war period, but increasing in 1919 to $340,025, and to $645,616 during the first nine months of 1920.

The same activity is shown in optical glass: In 1918 $341,724 worth were imported, jumping in 1919 to $410,775, covering 420,261 pounds; first nine months in 1920, $735,095, covering 680,412 pounds, showing that the importation from Europe is rapidly increasing as they are recovering from the effects of the war.

IMPORTANCE, DEVELOPMENT, AND FUTURE PROSPECTS OF THE INDUSTRY.

There are between 35 and 40 manufacturers, employing over 7,000 people, engaged in the manufacture of eyeglasses, spectacles, and lenses for eyeglasses and spectacles, and other appliances and fittings for opticians. Some of these concerns manufacture both spectacles and lenses; others only lenses; and still

others only the frames. These concerns are located mainly in Massachusetts, New Hampshire, Rhode Island, Connecticut, New York, Pennsylvania, Michigan, and Indiana.

The industry started in Southbridge, Mass., about 1833 in a very small way. The real development in this business has only come within the last 25 or 30 years.

The industry is an old one in Europe, being mainly located in Germany, England, and France.

In Germany particularly the work is done in the rural districts and the "home method," as it is called, is utilized to a great extent—that is, the work is given to the workmen by the manufacturer to take home and do there—this being the cheapest kind of labor and labor with which America has never been able to compete.

The importance of the industry can not be over stated, and is apparent at once to all. It covers the care of the vision of the eye and, therefore, stands in a class with medicines and other medical appliances, being absolutely necessary for the public health and welfare. It is also a key industry, in that all the fire-control instruments and appliances for ordnance are optical instruments. This is so to such an extent that the optical plans in European countries were taken over by their governments during the war and some of the plants in this country were also practically taken over by our own Government.

Eyeglasses and spectacles are not now sold like ordinary merchandise. They are sold on prescription, and a great deal of the charge for them is for professional service, either to the oculist or the registered optometrist. Therefore, a protective duty on the labor would hardly be reflected in the prices to the consumer.

The eyeglass and spectacle industry has practically developed around the town of Southbridge. The plant of the American Optical Co., located there, employs at the present time about 3,000 persons. There are some five or six other eyeglass and spectacle concerns located in this and neighboring towns. The town of Southbridge, of 14,000 inhabitants, is practically dependent upon this industry.

The industry, while not a large one, is a very important one, and has shown a healthy growth and development under wise tariff administration. As stated above, the schedules are very responsive to a tariff, as this is strictly a European industry, the raw material, namely, the optical glass, coming from those countries.

Just what would happen under a low tariff, if exchange conditions were equalized, etc., is, of course, problematical, but there was a decided jump in the imports immediately when the tariff act of 1913 went into effect, which was only held down by the occurrence of the war occupying the attention of the competitive countries. As soon as the war was over the imports immediately jumped until for the first nine months of 1920 there has been a larger importation than in any year for which we have a record, showing at least that the rates of the 1909 act were not excessive.

LABOR, WAGE, AND COST CONDITIONS.

Eyeglasses, spectacles, and lenses for same are from 80 to 85 per cent labor. The raw material from which lenses are manufactured is strictly a European product and has up until the war period been entirely supplied by our European competitors. We have had to import the glass from which we manufacture our lenses.

In prewar times and under normal conditions, American wages in this industry have been three or four times greater than those of foreign competitors, particularly Germany, where, as stated a good deal of the work is done in the rural districts, and a very low scale of wages prevails. Under the present abnormal conditions and based on the gold standard, wages in America are over ten times as great as those of Germany and over twice as great as those of Great Britain, and whereas wages have increased in Germany during the war the purchasing power has greatly depreciated. The mark on exchange has depreciated at the present time to 1.3 cents, and while the purchasing power of the mark for local purchases in Germany may be two or three times the exchange value, nevertheless figuring on the present rates in Germany as based on the purchasing power of their money, the American workman is getting in real purchasing power of his money between two and three times what his German brother receives for the same work. This disparity between exchange

value and purchasing power of the German money makes it practically impossible to compete with the German manufacturer.

It must be borne in mind that Germany was not devastated by the war and that in a great many sections of Germany, particularly those sections in which the optical industry is located, their plants have resumed work and are in a position to fill their orders.

Since the war, Japan has shown an interest in this industry. Statistics show imports of $235 worth from Japan in 1913 and about $25,000 in 1918. Once having started in the industry, we can look for vastly increased imports from this section of the Orient.

These conditions have always existed in our industry and as practically the whole of our product is a labor product, protection is needed for the American wage-earner to enable him to maintain his standards of living in competition with similar articles manufactured and shipped here from Germany and other parts of Europe. In fact the entire problem is practically one of protection of labor in a market in which the foreign competitor has both the cheaper labor and the home of the raw stock from which the goods are produced. Of course, it is realized that these conditions can not be equalized with any tariff that might be passed unless some arrangement such as the American valuation instead of the foreign valuation is worked out to equalize the cost situation at home and abroad so that it will not be totally destroyed by fluctuating rates of exhange.

PRICES—FOREIGN BUSINESS.

Germany, having the greatest depreciated exchange, from 23.8 to 1.3, and having a well-developed industry, is in the best condition under present conditions to bid for the world's business. It is next to impossible to obtain any authentic data as to prices, as we are informed that under a German law their merchants are not permitted to quote foreign countries in marks, but must quote in the money of the country to which they are going to ship—as, for instance, shillings in England and dollars in the United States. The prices they quote are not the prices prevailing in their own country but prices which they make to meet the competition in the market to which they are shipping, being placed sufficiently low to obtain the business in the country to which they export over the domestic business of that country.

The last quotations we have had in our line show that the Germans are able to lay down in London spectacle and eyeglass goods at about 40 per cent under what we can lay them doyn in the same market. If they can do this in England, they can do it to a still greater degree in America where the rate of exchange is still more in their favor. This 40 per cent, however, is simply their quotation to get the business. If they had to they could cut considerably under this and name a lower figure, for the reason that they have such a great differential in their labor cost. It is their plan to make the price as high as they can and still keep it attractive.

In normal times we have been able to obtain some foreign business, although our exports were never a very large percentage of our business. The business that we are able to obtain was on the better grade of goods in which we were able to produce better finished articles than the Germans, but under present rates of exchange and existing conditions we can not meet this competition in the foreign markets, and, as stated, the exchange is still further against us when German goods are shipped directly into this country.

The seriousness of this situation is borne out by the following advertisement from the Optician and Scientific Instrument Maker, the leading trade journal of the eyeglass and spectacle industry in England, under date of Friday, December 10, 1920:

"Now that the German mark is down from a shilling to a penny we appeal to all our friends to stand by us until the Government makes a move to prevent this absolutely unfair competition.

"It is no longer a fact that you are buying goods from abroad because you can not obtain the British-made article. We are now making G. F. spectacles on a large scale, and our goods are stocked by the principal wholesale houses. Optical Manufacturers (Ltd.) incorporating Wheway Optical Co. (Ltd.). Registered offices: 55 Hatton Garden, London, E. C. 1. Works: Vyse Street and Hockley Hill, Birmingham."

This advertisement is very timely, as it shows that Great Britain can not compete in our line with Germany, and also that Great Britain is now ready to manufacture these articles and would do so if it were not for this German competition.

INFORMATION CONCERNING DUMPING, UNFAIR COMPETITION, OR OTHER PRACTICES.

It is shown from the import census that there has been a tremendous jump in the first nine months of 1920. It is believed that unless a tariff bill is passed with great promptness that Europe will endeavor to ship large quantities of goods in our lines to this country before the tariff act passes into effect. It is therefore felt that if a detailed study is to be made on the question of exchange to find some way of equalizing the conditions, a temporary measure similar to the 1909 act should be passed to prevent as far as possible any dumping of commodities into this country while tariff legislation is pending.

SOURCES OF IMPORTS.

In 1913 the United States imported optical plates and disks valued at $506,594, and in 1914 at $617,703, of which 50 per cent came from Germany and 27 per cent from England.

In 1913 Germany exported optical glass of various kinds valued at $7,900,172. In the same year France exported lenses valued at $493,887, and other optical glass at $18,760.

In 1913 and 1914 the imports from Germany were 50 per cent of the total, while those from England were 27 per cent of the total.

In 1918 the imports from England were 73 per cent of the total, and were also 40 per cent in excess of imports from England in 1913.

Imports from France in 1913 were 18 per cent of the total, and in 1918, 26 per cent.

CONCLUSION.

Under normal conditions and rates of exchange, the rates of the 1909 act would not be excessive and would hardly be adequate. The matter is practically entirely one of wages and the wage earner needs the protection of an adequate tariff, which he would not have unless some standardization of exchange conditions is worked out so that a basis may be formed which will equalize at least the labor costs abroad with those of this country. It is also felt that this relief should be given as soon as possible to prevent the importation of large quantities of foreign goods into this country at low duty, under a depreciated exchange, which may be unloaded after the tariff is passed.

ALBERT B. WELLS, *Treasurer.*

P. S.—The following editorial clipped from our county newspaper, the Worcester Telegram, Worcester, Mass., under date of January 12, 1921, illustrates how rapidly industrial Germany is recuperating.

"THE GERMAN TRADE INVASION BEGUN."

"While German diplomatic representatives spar over the amount of indemnity Germany is able to pay, her industries work overtime. While they talk of 'driving her into bankruptcy,' her export trade grows, and her foreign markets are developed—by ability to undersell other nations. This is no speculation, nor prediction; it is the fact.

"Already Germany sells England more than she buys. The trade balance in her favor for nine months of last year was $20,000,000 of a total of about $90,000,000. She puts down cast-iron pipe in Sweden or Denmark at half the price the Scotch founders are able to quote. She offers newsprint paper in London for half the price of British manufacturers. Her dyestuffs are already regaining their ascendancy—through the prices quoted and the quality of the product.

"From Greece more than $1,000,000 worth of American manufactured goods have been shipped back here—because German goods are priced lower. American automobiles, which formed 92 per cent of all the cars in Greece, have fallen to lowest ebb 'while German Benz cars are becoming more and more numerous.' England bought $5,000,000 worth of German automobiles the first nine months of last year.

"This is not alarmist talk, nor warning, nor prophecy of what is going to happen; it is statement of fact. Germany is making of the delay-linger-and-wait policy of the allies her opportunity. Her diplomats craftily postpone the day of reckoning, and whine of poverty and bankruptcy—but her industries work overtime to regain their position in world trade and the figures show they are doing it by being able to lay down their goods in foreign countries at lower price than is possible for the manufacturers there to meet."

Optical Glass and Its Future as an American Industry.

By Arthur L. Day, Ph. D., Sc. D.

The problem of preparation for a war in which the scope of its technique and the wealth of the available resources are both practically unlimited, will hardly be comprehended at a glance by anyone, whatever his previous training may have been. It is an absolutely baffling task. By way of illustration, consider artillery fire, which during the Civil War was practically always point blank; that is, aim was taken directly at a near-by object, either in plain view or partially concealed by smoke. The effective range was rarely more than 3,000 yards, and the pieces were pointed by instinct or by sighting along the barrel, but none of the present day equipment for ascertaining the range of very distant objects was then thought of. Few of the guns were rifled at all, high-power explosives had not been discovered, muzzle loading by hand was nearly universal, and except for the old-fashioned siege mortars high angle fire was not attempted.

The artillery practice of the present war included, as will be recalled, the remarkable achievement of bombarding the city of Paris from a distance of about 72 miles. Moreover, in the regular daily artillery battles naval guns were frequently concentrated to "cover" an opposing battery which might be distant 10 miles or more, perhaps be completely concealed by intervening hills or trees, and which sometimes occupied no more space than an area 50 or 60 yards square. Moreover, it is told of this kind of fire that it frequently was so successfully concentrated that such batteries were completely wiped out by a single avalanche of high-explosive shell.

Artillery practice of this character necessarily requires instruments of the highest precision and of complicated mechanism which are capable of adjustment for nearly all variations of service conditions including allowance for atmospheric changes high above the earth. It is thus easy to see that not only must a high degree of mechanical skill be worked out in advance to provide technique, but the glass of which the optical parts of the instruments are made must be of the highest perfection in order not to vitiate this technique when developed.

The problem of supplying optical glass in adequate quantity and perfection was therefore one of the most serious problems confronting the Ordnance Department from the first moment when our entry into the war was seriously considered. There is no possibility of accurate fire control without optical glass.

At the end of March, 1917, a committee was appointed from the Naval Consulting Board to inquire into the supply of optical glass of quality suitable for fire-control instruments for the use of the military and naval forces of the United States in the event of our participation in the war. This is the first action of record, so far as I am aware, to obtain a supply of this absolutely indispensable material.

The situation may well have been deemed precarious, for the reason that at that time the European war had been going on for nearly three years and the available supply of imported glass in the hands of American manufacturers had become seriously depleted in filling contracts with various allied powers. In point of fact substantially all of the optical glass of the first quality on hand in this country in 1914 had been manufactured and exported in finished instruments, and none of the allied Governments had been willing, after the outbreak of the war, to allow such an indispensable material to be exported in quantity.

From the point of view of proper fire-control instruments, therefore, the moment chosen for the entry of the United States into the conflict was perhaps the worst that could have been selected.

The committee of the naval board which had been commissioned to investigate the optical glass resources of the country discovered and reported substantially this situation. In his report the chairman (Mr. Baekeland) outlined the conditions which he had found and recommended to the consideration of the Navy Department that the whole matter be placed in the hands of the Bureau of Standards, which, in his opinion, was in the best position to take up the question intelligently and to propose an effective solution.

The next active step to provide a supply of optical glass was taken by the National Research Council in April, 1917, a few days after our declaration of war. The speaker was delegated by this body to make a personal canvass of the possible resources of the country, visiting all who were known to have

knowledge of the manufacture of optical glass, and to report with recommendations.

This inquiry developed the fact, contrary to the news items on the subject which had begun to appear rather frequently in the papers, that optical glass in small quantities had been made in this country long before the year 1917. It is to the credit of the elder Macbeth, of the Macbeth-Evans Co., that the first attempt to manufacture in this country glass of high optical quality was undertaken in the early nineties, and a number of creditable lenses, some of considerable size, stand as monuments to the success of this effort. Nevertheless, the undertaking was financially unprofitable, and the enterprise was abandoned after a short time. In 1912 the Bausch & Lomb Optical Co., who were the largest manufacturers of instruments of precision in the United States, determined to control their own glass supply, and with the aid of a Belgian expert began making optical glass in their plant at Rochester. A factory fire soon afterwards consumed the building and some delay occurred, but in 1914 very creditable samples of optical glass were produced in this plant. Because of the demands of the Great War this industry flourished, and the initial small pot furnace was soon replaced by other larger ones, and at the period when this record begins (March, 1917) this company was engaged upon large contracts for field glasses for the Canadian Government and the British field service, in which the glass used was in part at least of American manufacture. The total output of this plant, which might be considered available for American use at this critical moment, was perhaps as much as 2,000 pounds per month, a quantity sufficient in their expert hands for a considerable number of optical instruments.

It is also a matter of record in the annual report of the Director of the Bureau of Standards, dated June 30, 1915, that the possibility of our being drawn into the European conflict had been foreseen and the consequent possibility of our being suddenly called upon to provide an independent supply of glass of optical quality had been considered there. Some time during this year a small furnace was erected at the bureau laboratory in Pittsburgh, in which a number of pioneer essays in this field were attempted. Chief among these was the effort to provide a suitable container or melting pot in which the glass could be melted without contamination. The clay which had been used in glass melting for most commercial purposes in this country before the war was also of foreign origin, and when this supply was cut off American pot makers found themselves without competent knowledge of American clays which might be substituted for the imported clay. The records of the United States Geological Survey show that clays are found in this country in greater quantity and variety than in any of the European countries, but in the absence of adequate knowledge of how to use them, the chance of developing suitable melting pots from American clays was not encouraging. The Bureau of Standards made a serious effort in the years 1915 and 1916 to meet this situation, but it happens that a glass-melting pot of suitable size for this purpose requires for making and burning a period of about four months, so that the development of the necessary experience proceeded slowly.

At the time when when our situation was most critical (March, 1917), the experimental work of the Bureau of Standards had not proceeded far enough to be of great assistance. Their experimental work with pots was not finished and only one type of optical glass (a borosilicate crown) had been successfully made.

During this period also, and more or less in collaboration with the Bureau of Standards, Mr. Carl Keuffel, of the firm of Keuffel & Esser, had erected at the works of his company in Hoboken a small furnace in which also a successful attempt had been made to produce this type of glass, using pots of his own design and manufacture.

In the year 1916 the Spencer Lens Co., of Buffalo, erected a small plant at Hamburg, N. Y., and also began the manufacture of optical glass with a view to replace the foreign sources of supply already closed by the war. The capacity of the plant, as operated during the late months of 1916 and early 1917, was not above 200 pounds per month, and actual production was considerably less than this, being uncertain both in quantity and quality.

The chemist of the Hazel-Atlas Co., Washington, Pa., Mr. Duval, who was also reputed to have been a successful maker of optical glass in Europe in earlier years, had already set up an extemporized furnace in this country and had melted a single pot of glass of such quality as to win favorable

consideration from a firm as exacting in its requirements as the John A. Brashear Co., of Pittsburgh.

It also appeared that in 1915 the Pittsburgh Plate Glass Co., at its plant in Charleroi, Pa., had begun making considerable quantities of spectacle glass and other high-grade special glasses not particularly intended for optical instruments, but nevertheless of excellent commercial quality. Incidentaly, this plant proved to be the largest in the United States which might be deemed immediately available for the production of optical glass, and if it should be possible to improve the quality up to the standards of the Army and Navy, might contribute much to relieve the immediate need.

This, then, was the situation at the period of our entry into the war. One firm was regularly producing glass of fair optical quality at the rate of perhaps 2,000 pounds per month. There was another plant of much larger capacity which might be deemed available, but which had never produced glass of strictly optical quality, and four others, including the Bureau of Standards laboratory, all of which were very small and still in the experimental stage.

The estimated requirements of the Army and Navy, as forecast by the General Munitions Board in the month of April, 1917, amounted roughly to 2,000 pounds per day.

There were very earnest conferences in the National Research Council following upon this discovery before a course of action was determined upon. Finally it was decided to ask the president of the Carnegie Institution of Washington to allow the resources of the Geophysical Laboratory, both in men and apparatus, to be applied to this overwhelming task. The obvious reason for this was not that optical glass had never been made there but that at the Geophysical Laboratory there was available a larger and more experienced group of silicate chemists than perhaps could be found elsewhere. This permission was granted by authority of the executive committee of the institution upon the 18th of April, 1917, 12 days after the declaration of war. From that time until the conclusion of the armistice on November 11, 1918, practically all of the resources of the laboratory were placed at the disposal of the Government without expense to it either direct or indirect.

Upon the assumption by the laboratory of this responsibility several steps were taken immediately:

(1) To initiate a canvass through the United States Geological Survey to discover a source of supply of sand of the highest possible quality.

(2) By a canvass of chemical manufacturing establishments to discover a source of potash with which to supply this indispensable ingredient which hitherto had been regularly imported from abroad.

(3) To delegate a group of men to make analyses of typical glasses of foreign manufacture with a view to determining the ingredients used and the relation between chemical composition and optical properties.

(4) To delegate a group of men to aid the Bausch & Lomb Co. in the development of new varieties of glasses which might be needed and in securing greater perfection of quality in those already made.

(5) To canvass the manufacturers of melting pots throughout the country and to make a careful examination of the iron content of these pots with a view of guarding against contamination of the glass melt by iron, for it is a well-known fact that of all the substances regularly present in optical glasses, iron is the one which most diminished transparency and is also the one most difficult to eliminate.

The results of this canvass will be adverted to in a moment.

After the organization of the General Munitions Board, of which Mr. F. A. Scott, of Cleveland, was the first chairman, the question of an optical glass supply was felt to be very acute. A number of sessions were held and eventually a committee was appointed (May, 1917) to give continuous attention to the task. The committee consisted of Prof. Millikan, of the University of Chicago, chairman; Mr. Stratton, of the Bureau of Standards, and the present speaker.

After the canvass of the situation, which has been outlined above, it appeared clear that all of the sources of optical glass available in May, 1917, could together produce only about half of the quantity required, assuming that all of the glass produced was of quality suitable for war equipment. At that time the Bausch & Lomb Optical Co. alone were producing glass of such quality. Moreover, it was estimated that they might, by extending their plant, carry approximately one-half of the war load. To maintain the other half there appeared to be but a single course open, namely, in some manner to make the

Charleroi plant of the Pittsburgh Plate Glass Co. available and to place some one in charge of it who should have sufficient knowledge of the requirements and technique to raise the quality of glass produced there to the standard which the Government required and which they had not hitherto attained alone.

After several conferences a plan was agreed upon whereby the Pittsburgh Co. should undertake to perfect their glass under the direction of the Bureau of Standards laboratory located near by. It appeared to the committee that such an arrangement might work out advantageously, for the chemists of the Geophysical Laboratory were already in charge at Rochester, and a gentle rivalry between the two institutions might prove an incentive to each, of a kind which might bring results more rapidly than without such an arrangement. In addition to this the Bureau of Standards had received through the Naval Board the sum of $75,000 for the extension of its own plant in Pittsburgh, and it was thought that with this organization thus strengthened and given control of the facilities at Charleroi, the other half of the war production would be attained.

In practice there was some disappointment in carrying out this plan. At the close of the year 1917 the Bausch & Lomb Co. was producing in Rochester at the rate of about 40,000 pounds per month, while the Pittsburgh Plate Glass Co. had not been able in the eight months interval to provide any glass which would pass the Government inspection standards.

At that time Mr Raymond, general manager of the Pittsburgh Co., decided that the basis upon which they were producing was not destined to prove successful, and application was made to the Geophysical Laboratory to divide its force at Rochester, and to permit a number of the chemists who had been successful there to take up the Pittsburgh problem. This was practically laying the entire load upon the Geophysical Laboratory, because only one month previous (December 4, 1917) the laboratory had taken the responsibility for production in the third of the optical plants, that of the Spencer Lens Co., of Buffalo, and every man of its force was occupied to the limit of his capacity. Indeed the requirements at that time were so pressing that there was need to strain the situation to the breaking point if necessary in order to secure the maximum producing capacity out of every available furnace. Dr. J. C. Hostetter, of the Geophysical Laboratory staff at Rochester, with three associates, Drs. Adams, Williamson, and Mr. Roberts, from the Washington laboratory, and Dr. Taylor, of the Bureau of Standards laboratory, by invitation, undertook this most difficult problem, beginning on January 1, 1918. Dr. Bowen was soon after detached from the Spencer Lens Co. plant and added to this group.

Speaking at this distance of the situation which then confronted us, it is perhaps not unfair to say that we would have done more wisely to have further enlarged the plant at Buffalo or at Rochester, or both, to the size required to produce the glass needed rather than to attempt the immediate problem which the Charleroi plant presented. Sixteen furnaces were available which had already been used for glass making, and others which might be turned to the task should circumstances require, but all of the furnaces were of an old type without regeneration and without means for controlling the temperature in individual furnaces within 100° C., whereas it was already established by our experience at Rochester that a control as close as 5° must be continuously maintained in each individual furnace to insure success.

The Pittsburgh Co. was liberal in its plans, and the Government placed a large contract, amounting to 100,000 pounds, with the company in order to afford an incentive to press forward as rapidly as possible the improvements which were needed. Certain specified improvements were even authorized to be changed against cost of the glass delivered. Nevertheless production lagged, and it was not until the following July that the output contemplated in the original plan was attained. In the intervening months the average production had been from 3,000 to 6,000 pounds per month, which afforded a modest contribution in addition to the production elsewhere, but it amounted to scarcely 10 per cent of the production of the Rochester plant throughout the spring months.

In contrast to this situation and to the difficulties encountered at Charleroi it is interesting to consider the progress of the small plant of the Spencer Lens Co., at Buffalo, in the same interval. This plant was new, and though small was capable of competent control. Accordingly, production up to the existing capacity began in the month of December and continued uninterruptedly thereafter until June, 1918, when it was approximately doubled by additional building,

and in August when it was doubled again. Two of the members of the staff of the Geophysical Laboratory (Drs. Fenner and Bowen) went from the Rochester plant to start this furnace, and of the first 22 pots which were put through after their arrival not one failed.

In the spring of 1918 the General Munitions Board was replaced by the War Industries Board, a considerably larger and more diversified body, but, like its predecessor, advisory rather than authoritative in character. Nevertheless, by agreement of the purchasing departments of the various ordnance bureaus authority was placed in its hands to exercise a certain amount of supervision of contracts with a view to increasing the effectiveness of production by regulating the size of contract and time of delivery to the producing capacity of the manufacturer and by aiding him in various ways. In particular, with respect to optical glass, the reorganization terminated the existence of the optical glass committee of the General Board, and in its place provided a certain amount of direct authority over manufacturing processes. For example, in the contract for 100,000 pounds of optical glass issued to the Pittsburgh Plate Glass Co. early in 1918, the specifications of the glasses and the conditions of inspection were written into the contract, together with the requirement that all of the glass to be delivered under the contract should be produced under the direct supervision of the Director of the Geophysical Laboratory, who was designated "in charge of optical glass production, War Industries Board." This arrangement had the effect of giving to the representatives of the laboratory in the various plants over which they exercised control absolute authority to prescribe the raw materials which should be used and the details of the processes through which these materials were to be passed up to the time of the inspection of the finished product, which was done by authorized representatives of the Ordnance Department of the branch of the service to which the glass was consigned. The Geophysical Laboratory at no time exercised any authoritative control over the inspection standards or the manner of applying them.

This organization and procedure was common to all of the three large plants until the conclusion of the armistice in November, 1918, and except for a small quantity of glass manufactured in the laboratory of the Bureau of Standards at Pittsburgh, and a still smaller quantity made by the Keuffel & Esser Co., covered all of the glass produced for war used during this year.

Leaving now the Washington organization and its relation to the manufacturing plants, some account may properly be given of the steps taken (1) to raise the quality of the glass to meet the inspection standards set by the Government, and (2) to increase production to the magnitude required by the war needs.

Although the phrase "optical glass" has become familiar through notices printed in the papers from time to time during the progress of the war, in point of fact but little has been printed of the qualities which serve to distinguish optical glass from other glasses. In general it may be said that optical glass is the highest type of clear glass known in the art. A single illustration may serve to explain my meaning. Ordinary spectacle glass in its conventional use appears clear and white, but if it is held so as to permit looking through the glass edgewise considerable color may usually be detected, so that it might occur to one as doubtful whether it would be possible to see clearly through the same glass if the thickness were represented by the width of the glasses rather than by their shortest dimension. For optical purposes, notably in the case of prisms used in range finders and periscopes, very much greater thicknesses than this are common, and a glass for such a purpose must be optically perfect throughout its thickness, which may often reach 4 or 5 inches.

The qualities assigned for test in establishing standards of inspection for optical glass, very briefly, are these:

(1) Homogeneity, by which is meant uniformity in chemical composition, freedom from striation, bubbles, inclusions, and crystallization.

(2) A constant refractive index and a constant dispersion ratio throughout.

(3) Freedom from color.

(4) High transparency.

(5) Both physical and chemical stability, by which is meant durability under exposure to the weather, chemical fumes, etc., as well as toughness and hardness for protection against misuse.

(6) Physical homogeneity, by which is meant freedom from strains or internal stresses caused by uneven cooling of the molten glass.

To produce glasses with these qualities the first obvious requirement is high chemical purity in all the ingredients of the glass itself, and the second either

an insoluble pot in which to melt it, or one in which the ingredients entering the glass from the pot shall not impair the development of the above qualities.

The search for such materials, which was immediately instituted by the Geophysical Laboratory when it was first authorized to take up the optical glass problem, yielded the following results:

After a search of the sand quarries from the State of Washington to Florida, including more than 45 different localities, a sand was finally located at Rockwood, Mich., of which the analysis indicated greater purity than that from any known source of supply, even including in the comparison the wonderful sand of Fontainebleau (France) which has been used both in France and England for artistic glassware for 100 years.

A number of sources of potash were canvassed, in the course of which much disappointment was experienced. Not only were the efforts which were first put forth in this country to make potassium carbonate less successful than might be wished, but the cost of manufacture was almost prohibitive. European potash was laid down in New York before the war at 6 cents per pound, while the major portion of the American-made potassium carbonate used in the manufacture of optical glass cost the Government in the neighborhood of $1 per pound. This fact is of some importance as an indication of the outlook in store for an independent optical glass industry in this country now that the war has closed.

It is to the credit of the Armour Co., of Chicago, that the first potassium carbonate of adequate purity was produced in this country. Subsequently it was found possible to substitute the nitrate for the carbonate, either in part or altogether, and so to obtain a salt which was eqully good and much more generally available. But even so, the necessary provision for potash in some of the glasses remained to haunt us throughout our entire experience of glass manufacture without reaching an altogether satisfactory final solution. Sulphur and chlorine, one or both, were very often found, and a small percentage of either is usually sufficient to give a milky cast to the finished product.

In view of the long period of time needed (about four months) to manufacture, to dry, and to burn the pots which must contain the glass during melting, to which allusion has been made above, this investigation also was never quite satisfactorily concluded. In the beginning it was of course necessary to purchase in the open market such pots as were then available. These had not been made with a view to their use in the manufacture of glass of high purity, and in general were found to contain about one hundred times as much iron per cubic centimeter as could safely be permitted in the finished glass (2 per cent, compared with 0.02 per cent). It is therefore a matter of easy calculation to show that, however pure may be the sand, potash, lead, and other ingredients required for a particular glass, there was more than an even chance that enough of the contact surface of the pot would be dissolved in the mixture to contaminate the contents of the glass beyond the limits of tolerance. Between the iron, which diminished transparency, and the sulphur, which even in very small quantities causes milkiness, many a pot of promising glass found its way into the Genesee River during the early days at Rochester without in any way aiding our troops at the front.

Nevertheless our pot makers, with a single exception, put forth a splendid effort to meet the situation by conducting experiments simultaneously in several plants, and it proved possible within four or five months to obtain containers in which the raw material was sufficiently free from contaminating elements so that glasses of a purity comparable with the best European glasses could be obtained. This conclusion was aided considerably by the discovery that if the pot was first burned in a furnace at a temperature considerably higher than any which would be required for melting the glass, burned even until the side walls showed signs of sagging and the surface became more or less glazed, then the solution of pot material in the glass was very greatly diminished. By the use of this process, even more perhaps than through more intelligent selection of clays, it became possible to melt nearly all of the glasses with a minimum of contamination from the pots.

Of course in the manufacture of optical glass, as opposed to other branches of the glass industry, a pot is used but once, which makes it very much easier to provide means for avoiding or limiting the solution of pot material in the glass. An absolutely insoluble pot is unknown for the reason that all of the oxides which enter into glass composition, as well as the refractory oxides used about the furnace, are mutually soluble.

Toward the close of the war period the porcelain type of pot developed by Dr. Bleininger, of the Bureau of Standards, was very successfully used with the glasses made in the bureau laboratory, but was not successfully manufactured by other pot makers in time to be of service. This pot possessed a smaller iron content and in general a lower solubility than any pot prepared for optical glass during the war period, but unfortunately could not be made generally available.

From the laboratory point of view the most interesting problem was presented in the initial studies at the Bausch & Lomb plant (1) of processes through which to obtain constant composition, and (2) to establish a definite relation between chemical composition and the optical constants prescribed by the requirements of the service.

In this connection it should be borne in mind that a glass solution is never in equilibrium; but is constantly changing in composition. Lead oxide and the alkalies are somewhat volatile, while the containing vessel continually contributes alumina, silica, and usually iron. It is, therefore, necessary for the student of glass melting who wishes above everything to attain to a prescribed chemical composition, to establish precise data upon the rate of evaporation at particular temperatures of those ingredients which pass out of the furnace and, at least approximately, the rate of solution of the pot in the glass. Knowing these quantities and the time of exposure necessary to mature a glass which is free from stones (that is, completely dissolved) and free from tiny bubbles, of which there is constant danger with every shift in the temperature, it is possible to produce successful pots of glass of accurately uniform composition and so to define and to reproduce definite optical constants.

The general relation between composition and optical constants is obviously the main issue in optical glass manufacture, and is, therefore, very conspicuous by its almost complete absence from the literature of the subject. Much of the optical glass technique has been enveloped in profound secrecy in all the three countries where it has been mainly produced, and although more or less freedom has been permitted in the publication of technical details of temperature, and even of chemical composition, the manner of varying optical constants in any desired way through changes in composition has remained a trade secret up to the present time.

In this connection it is perhaps interesting to remark parenthetically that at the time when the French liaison commission visited this country after our entry into the war, to aid us with their experiences in the production of war material, it was not permitted to divulge any details regarding the manufacture of optical glass upon the ground that the integrity of the existing glass monopoly in France had always been respected by the Government and must be so still, in spite of the war pressure. England adopted a similar attitude, and so in this one branch of the service the United States was left to proceed unaided to endeavor as best it might to reproduce within the period of a few months all of the experience which had been attained in optical glass manufacture since the days of Abbe and Schott in the early eighties.

It became necessary therefore to proceed much as a scientific man is accustomed to proceed in other unknown fields, by varying quantitatively each ingredient present and plotting the results in curves through which the effect of each ingredient on the optical constants of the resulting glass might be determined. This was done systematically and very successfully, so that within a period of three months from the beginning of our efforts it became possible for Dr. Fred E. Wright, who was in charge of the work at Rochester, to write formulas for any of the typical glasses required for war service without advice from the glass expert employed there, and, indeed, to prepare new glasses directly from the optical specifications when needed. A special heavy flint, for example, which was desired by the Government, was made with no more than two trials. To properly appreciate just what this progress means, it may perhaps be recalled that in the days of rule-of-thumb glass making as many as 150 essays were necessary before a glass of predetermined optical constants resulted. This kind of knowledge applied intelligently commanded for the laboratory workers the immediate respect and confidence of the workmen who had hitherto believed these things to be shrouded in impenetrable mystery, and contributed in no small degree to the rapid progress and wholehearted cooperation obtained.

Again later in the war, when the development of airplanes made it necessary to prepare a new type of airplane camera for battlefield photography, a special barium glass was made upon comparatively short notice which fulfilled the optical requirements with little if any variation.

Perhaps a brief digression may be permitted here to indicate the suddenness with which perplexing problems were precipitated by special inquiries like this. Most of the optical glasses in general use fall into two types, generally designated as flint and crown, both of which, when melted, form viscous mixtures which give little difficulty except in maintaining homogeneity. The barium crowns and flints, on the other hand, appear almost as thin as water in comparison and possess the disadvantage that they are taken up by the pots almost as rapidly as coffee is taken up by a lump of sugar. The most serious question encountered in connection with the barium glasses, therefore, was not to discover the composition appropriate to the prescribed constants, but to provide a suitable container in which the ingredients could be melted.

There is one other problem to which allusion should be made which is on the whole the most persistent and difficult problem encountered in the entire glass technique; it is the question of obtaining a homogeneous product. By this the glassmaker understands primarily freedom from striations or cords. It is fairly obvious that in a mixture, parts of which are volatile and into which other ingredients are entering through the solution of the containing vessel, inhomogeneity is constantly to be feared. Moreover, in the heavier glasses the differences of specific gravity among the ingredients amount to as much as three or four to one. These are the causes of the glassmaker's cords and striations, of which traces are found in the finest product of the glassmaker's art. It is to meet this situation that stirring is resorted to at several stages of the process.

Theoretically, if the stirring were vigorous enough, homogeneity would result except for the losses due to evaporation and the accessions (chiefly of alumina) from the pot wall; practically, this result is not so simply attained. Practically, indeed, perfect homogeneity in glass melts is unobtainable. Alumina in particular, even when present in very small quantity, yields a glass of lower refractive index than the surrounding mass and becomes immediately conspicuous. Incomplete solution of silica grains will sometimes leave a grain through the mixture resembling a comet's tail. Such striations are very persistent and require stirring, either constantly or at frequent intervals, not only during melting but during the cooling, in order to diminish, so far as possible, the convection currents or other migration within the melt. Even with all the precautions taken which the experience at the several factories suggested to us, rejections by Government officials were mainly on account of striations.

Toward the close of the war a new scheme of melting was developed, partly in the hope of providing a quicker process than the normal one and partly in order to render the striations innocuous by orienting them perpendicular to the plane of light transmission. This consisted in melting and stirring in very nearly the usual way, but instead of setting out the pot to be slowly cooled through a period of several days in order to be able to break it up without undue losses, the hot glass was taken from the furnace and poured upon a steel table in front of an advancing roller which rolled it out in a sheet, similar to the procedure in the manufacture of ordinary plate glass. Cooling the glass in the pots made it possible to reject the outer portions of the glass mass wherein usually the striations were found concentrated. Pouring left all of the striations in the finished product, and perhaps aggravated them somewhat, because the pouring had to be done at a temperature where the glass was by no means free from them. The results obtained by the rolling process, however, were fairly satisfactory, excepting for the most exacting requirements, because the striations were rolled out in planes parallel to the surface of the plate, so that it was possible to cut lenses from such a sheet in which the striations should all be perpendicular to the line of sight. Such glass was, in general, not well adapted for prisms or other optical forms through which light must pass by more than one path, but for lenses, even of considerable size, it proved satisfactory.

It should be borne in mind perhaps, that when glass must be produced in vast quantities for a war emergency the utmost requirements of precision may not be exacted; indeed, deliberate relaxation may become necessary. As soon as the standards arbitrarily fixed by the War and Navy Departments had been attained, further efforts to improve the quality of the glass gave place to efforts to increase the quantity practically without limit. It is therefore not quite fair to say that the war glass produced in this country was equal to or superior to that obtainable from abroad before the war. Strictly speaking, this result was not attained, nor, indeed, attempted, although the technique was so far perfected that it was within the power of those who participated to produce

glasses of quality equal to those made abroad when necessary. In fact, through the application of phosgene to remove the traces of iron from the sand and from the pots, it is altogether probable that greater transparency could be obtained than is usual in European glasses. It is in this quality of transparency alone that American glasses have usually fallen somewhat behind their European prototype. A process for the employment of phosgene for this purpose was successfully developed by Lieut. S. F. Cox in the Bausch & Lomb plant during the summer of 1918, but did not come into general use because the time required for such purification could be better spent, in the prevailing emergency, upon increased produtcion rather than upon a superfluous refinement.

It also proved practical to carry out the entire melting process within a period of 24 hours. Where, before the war, two weeks was not an uncommon period through which to nurse the melting operation in order to secure the best results, a 24-hour schedule was worked out by Dr. Morey at the Spencer Lens Co.'s plant under which glass equal in quality to any which was supplied to the Government during the war period was produced.

In so brief an outline as this must be, it is perhaps unnecessary to consider other details of the process of optical glass making, such as the relation between rate of cooling and the break-up of the mass with a minimum of waste, the process of molding the raw blocks to suitable shape for inspection and suitable size for the subsequent operation of the lens maker, the grinding of opposite surfaces for inspection purposes, and the details of the inspection process, and finally the part taking annealing, through the perfection of which alone accurate grinding becomes possible or worth while, and a permanent configuration is assured. All these processes required time and conscientious attention to detail for their working out, and in general require modification for each type of glass made, but they set no problem for the chemist and physicist beyond the requirement of endless patience and attention to detail.

Of the results of these efforts it need only be said that within a period of four months after the entry of the United States into the war the production of optical glass within this country had been doubled, the methods had been rendered more effective, the number of types had been increased, and moreover a degree of confidence had been established indispensable for the state of the times and of the task. I quote from a memorandum of Dr. Wright, written on July 28, after three months of experience in the manufacture of optical glass at Rochester.

"In the course of our work we have realized that the making of glass of high quality is not beset with mysteries to be solved only by the intuitive genius of one specially trained in the art, but that it is a straightforward scientific problem, requiring for its solution the application of methods of attack and control common to all scientific problems of high precision."

I venture to remark that before the beginning of this experiment at the Bausch & Lomb plant no member of the group of men who undertook the war work there had ever followed a pot of glass through the process of melting. Moreover, with the long record of secrecy continuously maintained in two of the glass-producing countries and in the third also, except for a portion of its early history, no information was available from without. Here, as in many other cases, however, when the details are finally brought to light by time, the maintenance of secrecy has frequently been shown to be a cloak to cover limitations rather than profound knowledge. The processes of glass making are simple and the traditions of the glasshouse are as often the result of cumulative superstition as experience. The heart of the whole matter lies in the relations between the ingredients at the various temperatures through which they pass and their reaction velocities. The solution of these relations is not a task for the glasshouse, but rather for the most exacting application of silicate chemistry at high temperatures.

The Geophysical Laboratory has published freely the results of its experience in the glass industry, and in so far as this experience was not available before, it is so now for any individual or group who may wish to make a beginning of a permanent optical glass industry in this country.

The portion of my subject which deals with the future of the industry must, however, remain vague. Three firms entered this field to produce optical glass on a large scale for war purposes, of whom two were able to make use of the product in instruments of their own manufacture. This portion of the industry may endure in whole or in part. The third successful producer of optical glass has to find his market outside his own plant, and this market is rather too intangible to be attractive as a business venture.

It remains true to-day, as it did during the war period, that the cost of several of the necessary ingredients is necessarily greater in this country than in European countries, where similar products originate. In this quality our raw materials are equally good, our experience in technique is adequate, if not equally extensive, with some of our European contemporaries, but the cost of potash, for example, will always lay a burden upon the American product, and other ingredients might be mentioned which fall in the same category. If there were a market sufficient to stimulate production on a very large scale these difficulties could be overcome by improved technique and organization, as in the case of other conspicuous American industries, but the demand for optical glass will probably never be large, and the incentive to large-scale processes and cheaper production will therefore probably always be lacking unless the Government determines upon a definite program of preparedness. The instrument maker may find it advantageous to make his own glass for the reason that he can then arrange for the precise optical constants which he wishes to use in his instrument, and he may have them within a period of a few days instead of weeks or months, but the trade in itself will perhaps never furnish sufficient incentive to build up a large industry in this country.

Moreover, if it may be said without appearing to reflect upon similar industries abroad, it is, I think, no secret that successful makers of optical glass in other countries have had to look for their profit in other lines rather than in their optical products.

In closing this account of the effort which was made to supply the Government with its indispensable requirements of optical glass, it gives me unusual pleasure to pay a personal tribute to the whole-souled patriotism and untiring patience of all members of the staff of the Geophysical Laboratory and of the participating manufacturing firms, without whose efforts this record would have been impossible. It is to them an everlasting credit that through their exertions the great, and in many respects unparalleled, task of developing an entirely new industry was accomplished, literally out of nothing in the way of special experience because of the atmosphere of secrecy with which this particular industry has been so persistently enshrouded. It was also accomplished in time for the requirements of the service.

The total quantity supplied by these firms from April 6, 1917, to November 11, 1918, the war period, is approximately 650,000 pounds, divided approximately as follows:

	Pounds.
Bausch & Lomb Optical Co	450,000
Spencer Lens Co	75,000
Pittsburgh Plate Glass Co	125,000

In addition to this production, the Bureau of Standards supplied a little more than 19,000 pounds, or about 2.8 per cent, of the total war-time production.

Except for occasional shipments of a few pounds from the Parra Mantois Co., in France; from the British Government plant at Derby; and that produced by the Keuffel & Esser Co., of New York, for their own contract (about 9,000 pounds for the period of the war), no other optical glass was available to the Government for war operations.

ICELAND SPAR.

[Paragraph 549.]

DEAR JUDGE: I ask you to submit to the attention of the Committee of the House on Ways and Means a request that Iceland spar be granted a protective tariff of 50 cents per ounce.

For 300 years the sole source of supply of Iceland spar for use in making optical instruments has been in Iceland. That supply is now waning, and the only other known source of material fit for optical purposes has been recently discovered in the Warner Range of Mountains in Modoc County, Calif. Iceland spar of inferior quality is found in many other places, but of a quality suitable for optical purposes I believe the supply to be limited to these two places—Iceland and the Warner Range of Mountains in northeastern California.

It occurs in ledge form, the ledges varying in thickness up to about 18 inches. But of this mass but a very small percentage is fit for use. It has to be mined with great care, as it is easily shattered. Use of powder or explosives is pro-

hibited. From a crystal in the rough weighing perhaps 25 pounds one small crystal of an ounce or so may be obtained. Prior to the war it sold at from $3 to $4 per pound; during war times the price rose to $20 per pound; it is now back to from $8 to $9 per pound. That is the basic price for crystals of one ounce in weight; for each additional quarter of an ounce in weight 50 cents per pound is added. A protective tariff of 50 cents per ounce would add but 50 cents to the price of each optical instrument, but would give a great stimulus to the development of this typical "infant industry." A return to prewar prices would simply annihilate this industry if left unprotected. The importance of having a home source of supply of raw material for this manufacture, upon which the sugar industry and some of the sciences are dependent, should be apparent at once. Spar in the Warner Range of Mountains is to be found throughout Modoc County and over into the adjoining portions of Oregon and Nevada. Stimulated by a protective tariff, there seems little doubt but that a dependable supply of this valuable material will be developed. The manufacture of optical instruments is well able to bear the small additional cost entailed.

W. H. PATTERSON.

PHOTOGRAPHIC DRY PLATES.

[Paragraphs 87 and 340.]

BRIEF OF THE G. CRAMER DRY PLATE CO., ST. LOUIS, MO.

We inclose copy of our letter of April 23, 1920, to the United States Tariff Commission, which we would now like to supplement with the following facts:

I. At present we are buying Belgian photoglass almost exclusively at prices (even when computed in our money, allowance having been made for the current depreciation of the Belgian franc) over 75 per cent higher than immediately before the European war. These are latest prices and represent substantial reductions over a year ago. Our only source of supply in America is the American Window Glass Co. of Pittsburgh, who continue to maintain their prices at the peak reached during the war, same being approximately 50 per cent higher than the present Belgian, which latter, as you will note from the foregoing, are still very high. The manufacture of photoglass is, as we understand it, only a small part of the business of the American Window Glass Co. and they have repeatedly threatened to discontinue this department entirely, and shift their photo tanks over to window glass if we did not patronize them at the prices and under the conditions they prescribed. At present they are getting very little photoglass business because of (1) their failure to reduce prices; (2) the superiority of the foreign photoglass.

If the duty on photoglass is materially advanced, it will seriously affect the only competition now being given this concern, and in the writer's judgment will result disadvantageously to the dry plate industry, and the consumers of such material. Realizing that we were cut off from other sources of supply at the outbreak of hostilities in Europe in 1914, the American Window Glass Co. raised their prices for photoglass about 20 per cent within 60 days thereafter, and at intervals since so that to-day the same are almost two and a half times what they were in the summer of 1914. We have no records to prove it, but we strongly suspect that both American window and photoglass have been sold at enormous profits during the time when the war eliminated competition.

II. Photoglass is now classified with window glass, and if it can be done practically, it should be separated, as conditions which affect the tariff on glass used for window purposes may be radically different from those on glass for photographic dry plates. The glass used for dry plate purposes is better in quality than that used for windows, being freer from mechanical defects, and possessing less curvature. The greater part of this is in sizes 8 by 10 inches and under, whereas glass for windows is, upon the authority of a large local window glass dealer, in 95 per cent of all cases, 10 by 12 inches, or larger. If it proves impractical to separate photoglass from window glass in the classification, we would recommend that a low tariff at least be adopted for glass of 18 united inches or 80 square inches and less. This would prove very advantageous to American dry plate manufacturers, and yet would seemingly not affect to any great extent the interests of the American manufacturers of window glass.

III. Competition of foreign-made photographic dry plates is beginning to be felt somewhat, a case having been called to our attention within the past few days by a local manufacturer of lantern slides, who showed us a fresh quotation made by a New York importer on a well-known British-made lantern slide plate, which was lower than prevailing wholesale selling prices for American Lantern slide plates. Our dry plates were advanced in price only about 55 per cent from 1914 to their peak in 1920, and were sold throughout that time at a net profit of about 10 per cent and in some cases less. Other American dry plate manufacturers have sold at about the same relative figures.

IV. It may seem inconsistent to the committee that we ask protection on finished dry plates and a low tariff on the raw materials that enter into their manufacture. The answer is that dry plates have for at least the past 20 years been sold at an extremely small margin of profit. Our domestic business has seldom netted more than 10 per cent profit and some years considerably less. Much of our export business has been done at a loss, in an endeavor to compete with British competition in foreign markets, labor having heretofore been very much cheaper in England than in the United States.

V. We believe the total value of photographic dry plates manufactured annually in the United States based on the wholesale selling prices, is between $5,000,000 and $6,000,000.

UNITED STATES TARIFF COMMISSION,
Washington, D. C.

GENTLEMEN: Under prevailing conditions it is extremely difficult to give you the information requested in your letters of December 5, 1919, and the 7th instant. This, because manufacturing costs and prices are constantly changing, and because the tariff act of 1913 having been in effect only a very short time before the outbreak of the war, no fair opportunity to judge as to the manner in which this act might affect the photographic industry during normal times has been afforded.

(1) The extent of competition of foreign-made dry plates has of course been almost negligible during the war, but there are signs of activity now, certain of the larger Eastern Photo Supply dealers devoting space to the advertising of British-made plates, for which they have obtained agencies. Just how keen this competition will be in the future will depend almost entirely upon the manufacturing costs of the European manufacturers, as compared with ours. Should their labor become cheaper, and ours continue advancing, or even remain where it is, we will undoubtedly need either a higher tariff on imported dry plates or a lower tariff on raw material, especially glass, or both, to protect us.

(2) A comparison of our manufacturing costs with costs of principal competing imports is unavailable, because we have no way of ascertaining the manufacturing costs of foreign manufacturers.

(3) Foreign wholesale prices are fluctuating constantly. We understand they advanced tremendously during the war, then were reduced, and recently have again been advanced, so that it is impossible to submit the comparison you request.

(4) We are very largely dependent upon imports of raw materials for the manufacture of photographic dry plates, the principal ones being glass and emulsion gelatines. At the present time there is but one manufacturer of photo glass in the United States, viz., American Window Glass Co. of Pittsburgh, and they recently withdrew from the market entirely for a period of several months, and now threaten to shut down their photo glass department, and confine themselves to the manufacture of window glass exclusively, alleging that the enormous demand for the latter commodity and the larger profit warrants such a move. During the war, when importations from Europe were shut off, we resorted largely to the reclaiming of old negatives, which we purchased from photographers, washed off and recoated. This, however, is unsatisfactory. In normal times we would probably use new glass entirely, and prefer Belgian, because of its superiority to what has thus far been manufactured here. Previous ot the war we imported possibly 90 per cent of our glass and a like proportion of our gelatines. Our industry would undoubtedly be benefited by a low tariff on there raw materials.

(5) We can offer no opinion, either favorable or otherwise, as to the present tariff, for the reasons stated in the opening paragraph of this letter.

Hoping that the information contained herein will be of some benefit, and regretting that prevailing conditions make it impossible to furnish more complete data, we are,

G. A. CRAMER, *President.*

TELESCOPES, MICROSCOPES, ETC.

[Paragraph 94.]

BRIEF OF W. & L. E. GURLEY, TROY, N. Y.

In re paragraph 94 of Schedule B, "Surveying instruments, telescopes, microscopes, photographic and projection lenses, and frames and mountings for the same."

For 16 years under the Payne and Dingley law these articles were dutiable at 45 per cent ad valorem. The Underwood law reduced the rate 44 per cent below that previously in effect, and fixed it at 25 per cent ad valorem.

Years ago a large proportion of the instruments of this nature used in the United States were manufactured abroad, and the importations came principally from Germany and Switzerland. Their low wage scales and manufacturing costs enabled them to so greatly undersell our domestic product that it was practically impossible to successfully make them in this country.

The rate of 45 per cent ad valorem did not serve to overcome the vast difference in wages and did not shut out the importation of foreign goods, but it did hearten the American manufacturer to continue his efforts. Slowly, through a process of education, which familiarized the American engineer and other users with the accuracy, precision and dependability of the domestic-made instruments, a growing demand was created for them. The manufacturers by adding one instrument at a time to their lines and standardizing their product as far as possible, had begun to build up the industry in this country when the Underwood law was passed.

Fortunately the European war shut off the German supply and created a demand which the American makers were called upon to fill. They successfully did this, and when the United States entered the war were in a position to turn over a great part of the production of their plants to the manufacture of instruments for various military uses by the Army and Navy.

Telescopes, surveying and azimuth instruments are an essential part of modern artillery. We have passed the days when gunners fired at visible objects. The high powered artillery of this period is more frequently directed at unseen targets, and it is a mathematical and mechanical problem to plot the target and set the guns by precision instruments. High-class instruments of this character are an absolute necessity for the Army and Navy, and it is equally vital to have a source of supply in our own country free from any foreign control.

We are one of the oldest manufacturers of these instruments in the United States, our business being established in 1845, and our instruments have long had the reputation of being of the highest class to be found in the United States. During the war we turned over the major portion of our output for Government purposes, as did the other domestic manufacturers of such instruments.

Our standard apparatus complied with the rigid Government specifications and we were able to fill orders promptly, and without changing designs or other manufacturing processes. The public service rendered by the American manufacturers of surveying and precision instruments during the war is one which certainly entitles the industry to a sympathetic hearing and to recognition.

Seventy-five per cent of the cost of production of such instruments is labor cost, which places the American manufacturer at a great disadvantage when competing with the foreign manufacturer with his low wage scales. The raw materials required are slight and available within the borders of the several foreign countries The present tariff duties afford no relief whatever, and the volume of imports is bound to increase if this condition is not remedied.

The labor employed in the American industry is highly skilled, and expertness is only attained after long training. The wages are commensurately high for these workmen. There are a substantial number in the industry, and

they should not now have to face unemployment, through floods of cheap foreign goods under a low tariff.

In view of the vital need of these instruments for military purposes, as well as their wide use in peace-time pursuits and the inestimable value of fostering a domestic source of supply, it is urged that a rate of duty at least as high as that carried in the Dingley and Payne laws be written into the proposed new tariff law, namely, 45 per cent ad valorem.

STAINED OR PAINTED GLASS WINDOWS.

[Paragraphs 95 and 655.]

OTTO W. HEINIGKE, REPRESENTING THE NATIONAL ORNAMENTAL GLASS MANUFACTURERS OF THE UNITED STATES, NEW YORK, N. Y.

Mr. HEINIGKE. I have been chairman of the tariff committee of the National Ornamental Glass Manufacturers Association for six years, and for two years prior to that served on the committee, and I have been in the stained glass business for 17 years.

I have heard of business—complaints have been made recently that some importers of this commodity, that is, some American agents of foreign importers, are offering the Munich type of stained glass window and stained and painted windows at lower prices than before the war.

It costs the producers here approximately double the prewar cost to produce these articles.

The item of wages consumes 70 per cent of the cost, and the mechanical cost; that is, the cost for wages here are so much greater than in Germany that the importers are able to offer windows at $3.26 per square foot. The same windows cost our producers $12.72 per square foot.

The CHAIRMAN. Can you tell us what the foreign wages are?

Mr. HEINIGKE. Yes, sir. The wages at the present time for flesh painters in Munich are 20 cents per hour figured on a 2 cent mark.

The CHAIRMAN. How much per hour are they in this country?

Mr. HEINIGKE. A dollar and fifty cents per hour.

Mr. GARNER. You say the quotation from the foreign countries is $3.20 per square foot and that it costs you more than $12?

Mr. HEINIGKE. It costs us $12.72.

Mr. GARNER. And you must have 200 per cent in order to continue in business?

Mr. HEINIGKE. Yes, sir.

Mr. GARNER. That is rather light—about the lightest I have heard.

Mr. BACHARACH. That is only at the present time, on account of the present exchange?

Mr. HEINIGKE. Yes, sir; to a large extent.

The CHAIRMAN. I did not mean to interrupt you except to get in the record somewhere what the labor costs and the costs of production are here as compared to what they are in foreign countries.

Mr. HEINIGKE. Yes, sir; 75 per cent of the raw material which enters into a window is imported and pays 30 per cent duty under paragraph 95 of the present tariff law.

We have knowledge that several highly skilled glass painters have recently left this country to seek employment in England because of the prospects of no employment in this country in the next

6 to 12 months. Many other highly trained workers in the industry have been compelled to seek employment in other lines.

This lack of employment has become so acute as to result in the loss of orders to the American producers in the last six months, during which time the American agents of the German producers have become very much more active in soliciting orders.

They reduced their price within the last six months, and there seems to be no objection to placing even an order for memorial windows to soldiers with the German firms.

Stained-glass windows are a luxury, and are in no wise an essential to the life and happiness of the person of moderate means. Therefore, we think that a person who has devoted a considerable portion of his life to training himself and his associates for their production is entitled to protection of the tariff sufficiently to offset the great advantage which foreign competition is now enjoying, as we are not able to compete with the European producers.

Mr. RAINEY. Do you know whether we are exporting any of these articles to Europe?

Mr. HEINIGKE. In my 17 years' experience, I only know of two windows which have been exported.

The wages of glaziers in Germany in 1913 were 14 cents per hour, as compared with 30 cents per hour in this country.

To-day the wages of a glazier in Germany, at a 2-cent mark per hour, are 14 cents, and the same wage paid in America is 80 cents per hour.

This is an average, taken from an up-to-date survey of the wages in all of the large centers in the country. We are asking for 45 per cent, which was the tariff under the Payne-Aldrich Act. Under the present conditions that is entirely insufficient. We need a much higher rate. We are therefore asking that that in parapraph 95 of the 1913 act be changed to 45 per cent, as it was under the Payne-Aldrich Act, and that a specific duty of $8 per square foot be added for stained or painted glass windows, or parts thereof, and that the word "exclude" be substituted for the word "include" in line 5, paragraph 655.

The CHAIRMAN. What was it under the Payne law; you are asking for $8 now?

Mr. HEINIGKE. There was no specific duty under the Payne law.

The CHAIRMAN. There was just 45 per cent ad valorem, and you are now asking in addition to that $8 per square foot?

Mr. HEINIGKE. Yes, sir; we are just asking for the difference between the cost of production in Europe and the cost in America.

Mr. TIMBERLAKE. What did you say that your costs are per square foot?

Mr. HEINIGKE. About $12.72.

The CHAIRMAN. That is pretty high.

Mr. BACHARACH. What were your prices before the war?

The CHAIRMAN. I would like you to point out the difference between your costs and the foreign costs.

Mr. HEINIGKE. Yes, sir.

Mr. BACHARACH. Is your work done, any of it, by mechanical process?

Mr. HEINIGKE. No; none of our business is reproduced by mechanical methods. Every bit of it is handwork from the very beginning of the design to the end of the work.

Mr. TIMBERLAKE. What is the percentage of the labor cost?

Mr. HEINIGKE. Seventy per cent.

Mr. YOUNG. How many men do you employ in the industry?

Mr. HEINIGKE. It is difficult to get a correct survey, but we estimate about 5,000.

Mr. GARNER. And most of them are leaving this country and going over to England?

Mr. HEINIGKE (interposing). I do not say most.

Mr. GARNER. A good many laborers, if I understood you, are now leaving, going to Europe.

Mr. HEINIGKE. I would not even mislead you to the extent of having you think that a good many. But, an important factor in our business is that a flesh painter is a very highly trained man, who is a sensitive man, being of an artistic temperament; he will not take a chance, and the minute that the work slackens here he hunts for a new field where he may, perhaps, get employment.

Mr. GARNER. And you say he is going over to Europe, seeking this lower wage?

The CHAIRMAN. Mr. Heinigke, you say you want $8 per square foot and 45 per cent ad valorem. What does that product sell for per square foot?

Mr. HEINIGKE. By the English?

The CHAIRMAN. What does your product sell for per square foot; or what is it sold for in this market?

Mr. HEINIGKE. About $13.

Mr. HAWLEY. Is that the cost of production or the price at which you sell?

Mr. HEINIGKE. That is the cost plus a 10 per cent profit.

Mr. HAWLEY. You stated a moment ago something about importing some of your raw materials. What are those raw materials which you import?

Mr. HEINIGKE. Glass, colored glass.

Mr. HAWLEY. And do you pay duty on them?

Mr. HEINIGKE. Yes, sir.

Mr. HAWLEY. How much of the total amount of material which is put into a window is imported; all of the glass?

Mr. HEINIGKE. All of the glass; yes, sir.

Mr. HAWLEY. What percentage is that of the cost of the whole window, when complete?

Mr. HEINIGKE. Seventy-five per cent of the value of the raw material; 75 per cent of the raw material which goes into the window is imported, and the raw materials are only approximately 30 per cent of the cost of the window. Labor is approximately 70 per cent.

Mr. HAWLEY. What paragraph is that taxed under?

Mr. HEINIGKE. Under paragraph 95. And then, the protection was taken away under paragraph 655 of the free list.

Mr. GARNER. As I understood, you said you wanted the difference in the cost of production here and abroad and 10 per cent.

Mr. HEINIGKE. No, sir.

Mr. GARNER. Well, what tariff do you want?

Mr. HEINIGKE. We want a tariff which will make our costs equal to those of the foreigner f. o. b. seaport in this country.

Mr. GARNER. And that will take 45 per cent ad valorem and $8 per square foot?

Mr. HEINIGKE. Yes, sir.

The CHAIRMAN. What is the selling price per foot?

Mr. HEINIGKE. The average is $3.26.

The CHAIRMAN. And your costs are practically $13?

Mr. HAWLEY. No, $12.72.

Mr. HEINIGKE. Our costs are $12.72—our average costs.

The CHAIRMAN. Now, the selling price is $13; I understood you to say $13, instead of $12.72.

Mr. HEINIGKE. Sir?

The CHAIRMAN. You are asking for more than $13 per square foot; $8 and 45 per cent ad valorem would be $13.85.

Mr. HEINIGKE. It is 45 per cent on $3.26, sir.

Mr. BACHARACH. What was the price before the war; the selling price?

Mr. HEINIGKE. Mr. Chairman, I should say that it was on the same basis as we have taken for this. We estimate the cost between $5 and $6.

Mr. BACHARACH. Between $5 and $6.

Mr. HEINIGKE. It is hard to say definitely, because every window costs a different price, and some will cost more than others.

Mr. BACHARACH. You made an interesting statement a moment ago as to the windows being put up as memorials to our soldiers being imported from Germany. Do you know that to be a fact?

Mr. HEINIGKE. I was so unfortunate as to meet competition of that kind.

Mr. GARNER. How do the importations from Germany get in; are they licensed by the War Trade Board?

Mr. HEINIGKE. They do not seem to be having any trouble in bringing them in.

The CHAIRMAN. According to the figures I have, it would bring it up to $12.64, while your costs are $12.72, you say.

Mr. HEINIGKE. Yes, sir; $12.72. Mr. Nadler is better able to answer with regard to those figures than I am. He is a more practicable manufacturer.

Mr. HULL. That would make an ad valorem equivalent of how much? It looks like it would be between 400 and 500 per cent.

Mr. GARNER. Just make it 400 per cent; that is just as good a guess as any.

Mr. YOUNG. It would be less than 300 per cent.

Mr. HULL. This is the Germans you are comparing this cost with?

Mr. HEINIGKE. From the Germans.

Mr. HULL. What do you know with regard to the other competing countries; are any other countries competing in this business besides Germany?

Mr. HEINIGKE. England is higher we know, but we have no specific quotation.

Mr. HAWLEY. Higher than what?

Mr. HEINIGKE. Higher than the German costs. We have no specific quotations from them, and the only other large factor in the

importation is Austria, and we have not heard of any importations from Austria.

Mr. DICKINSON. You say there seems to be no trouble in these shipments coming in: do they come direct from Germany, or are they coming from Holland or some other country?

Mr. HEINIGKE. I have not heard that. I can not answer that definitely.

Mr. DICKINSON. You do not know?

Mr. HEINIGKE. We can find that out and submit it later.

Mr. HAWLEY. Are your windows considered a finer product than the German windows?

Mr. HEINIGKE. No, sir; there is not any individual who does a very high-class artistic work, with the exception of one or two men, who have been honored by the French Government for windows which they have exhibited in France, and men of that character. This is a different class of work. Ours is all based on a commercial product, and in my estimation there is no appreciable difference in the artistic quality or mechanical quality between the German and the American product.

On January 3, 1921, I wrote and mailed a letter to Mr. Emil Frei, 34 South Grand Avenue, St. Louis, Mo., in which I asked him to tell me what the wages are for glass painters and lead glazers in Munich. I will submit a copy of the letter, and I received a telegram from Mr. Frei stating that flesh painters received 10 marks and draper 8, ornamental 7, and glazers 7 marks per hour.

Mr. Frei is in a position to furnish that information because he has recently returned from Munich where he reestablished a factory which he had established to meet the quotations of the foreign importers brought about by the 1913 act. He is a German manufacturer but also a member of our association and as to his loyalty there should be no question.

MY DEAR MR. FREI: A happy New Year to you and your family.

Can you tell me what the wages are for glass painters and lead glazers, in Munich, to-day?

I need them to make a statement to the Ways and Means Committee, and those that I have came indirectly, so I do not like to use them. If you have them, tell me how many marks per hour. Please telegraph like this:

Flesh, —; drapery, —; ornament, —; glazers, —; and I shall know that flesh painters are paid — marks per hour.

Has the system of apprentices paying for their tuition been changed?

OTTO W. HEINIGKE,
Chairman Tariff Committee.

[Telegram.]

ST. LOUIS, MO., *January 7, 1921.*

OTTO W. HEINIGKE, *New York, N. Y.:*

Flesh, 10; drapery, 8; ornament, 7; glazers, 7.

EMIL FREI ART GLASS CO.

FRED NADLER, REPRESENTING THE ORNAMENTAL GLASS MANUFACTURERS OF THE UNITED STATES, NEW YORK CITY.

Mr. NADLER. Fred Nadler: I am in charge of the stained or painted glass studio of Da Prato in Union Hill, N. J., and as an importer and manufacturer have been engaged in this business for 15 years. I have charge of the keeping of costs and the estimating for my principals.

I have in my hand here [indicating] sketches, cost sheets, comparative tables of American and German costs, comparative table of German and American wage rates, and quotations covering the sketches. Cost sheet No. 1 refers to sketch No. 49007 and shows cost of manufacture of window in America; sheet No. 2 shows sketch No. 416007; sheet No. 3 shows sketch No. 418003; sheet No. 4 shows sketch No. 312006; sheet No. 5 shows sketch No. 315004; sheet No. 6 shows sketch No. 315007; sheet No. 7 shows sketch No. 818006; sheet No. 8 shows sketch No. 715006.

The letter from Kunst Glasmateri and Preckel, Cologne, with the quotations accompanying it, particularly those checked, refer to the sketches, which are the same sketches referred to in the cost sheets.

The table of comparative costs in Germany and America is gotten by taking these quotations last referred to and giving the mark a value of 2 cents instead of 1.34 cents, as quoted lately, and by adding thereto freight and costs of sketch. The result of this tabulation shows that the window costs are as follows:

	German.	American.		German.	American.
Cost sheet No. 1, sketch No. 49007	$2.12	$5.96	Cost sheet No. 5, sketch No. 315004	$3.41	$17.70
Cost sheet No. 2, sketch No. 416007	3.56	11.30	Cost sheet No. 6, sketch No. 315007	3.26	12.72
Cost sheet No. 3, sketch No. 418003	3.50	11.25	Cost sheet No. 7, sketch No. 818006	3.92	28.47
Cost sheet No. 4, sketch No. 312006	2.26	6.13	Cost sheet No. 8, sketch No. 715006	3.92	19.53

The CHAIRMAN. You may file that table showing the costs.

Mr. NADLER. Yes; we have this for different concerns in Germany. We furnished them sketches and they gave us these estimates.

Mr. GARNER. You want a rate placed in this bill which will enable you to meet the cost prices you have read from that paper?

Mr. NADLER. We should want a duty which would make it possible for us to meet the costs or average cost of windows brought over here, not each one.

Mr. GARNER. Then, you will go out of business if we give you a rate of duty that is not as high as the rate you suggested a while ago, 400 per cent? Even 400 per cent would not take care of item No. 7.

Mr. NADLER. No, sir.

Mr. GARNER. Because the German price is $3.96, while the American price is $28.47.

Mr. NADLER. No, sir; it would not be that.

Mr. GARNER. Any duty less than that, of course, would put you out of business?

Mr. NADLER. We can not very well exist unless we have protection.

I also have a table of the relative costs of labor in Germany and America, and this shows on an hour basis that German flesh painters get 20 cents per hour, in America, $1.50; drapery painters in Germany 16 cents per hour, in America $1 per hour; ornamental painters in Germany 14 cents, in America 80 cents; glaziers in Germany 14 cents an hour, in America 80 cents.

The CHAIRMAN. Are you figuring on a gold basis, or on their depreciated currency?

Mr. NADLER. I am figuring on their depreciated currency.

Mr. HAWLEY. With the 2-cent mark?

Mr. NADLER. Yes, sir.

Mr. HAWLEY. Well, that is really on a gold basis.

Mr. NADLER. I see. This is with the mark at 2 cents. If it falls below that amount, the costs of the German window and the cost of the German labor both become less. The American figures are fair rates for America and are the wages we pay our employees in our studios. The German wages are based on information furnished by Emil Frei's Art Glass Co., St. Louis, Mo., who operates a factory in Munich, Germany.

We believe these to be correct as checked with other information at hand.

Relative cost of labor in Germany and America.

Flesh painter.			Drapery painter.			Ornamental painter.			Glazier.		
German.		American.	German.		American.	German.		American.	German.		American.
Marks. 10	$0.20	$1.50	*Marks.* 8	$0.16	$1.00	*Marks.* 7	$0.14	$0.80	*Marks.* 7	$0.14	$0.50

Prices for sketches and for finished productions.

Number.	Subject.	Cost of sketch.	Cost of window per square meter.
		Marks.	*Marks.*
715006	St. Sippe	600.00	1,800
818006	Holy Rosary	800.00	1,800
715007	Moses	220.00	1,500
315007	Coronation of St. Vincent	150.00	1,500
718006	Carrying Cross	95.00	1,200
810004	Single figure	120.00	1,000
315004	Holy Family	200.00	1,500
412003	Carrying Cross	120.00	1,200
312006	Single figure	150.00	1,000
728003	....do	150.00	1,200
416003	Wedding group	290.00	1,600
418003	Group of Penance	290.00	1,600
912009	St. Boniface	240.00	1,200
812009	St. Elizabeth	240.00	1,200
714006	St. Michael	150.00	1,300
416007	Annunciation	360.00	1,600
516007	Orpheus	150.00	1,600
824006	St. James	480.00	1,000
318007	Resurrection of Lazarus	300.00	1,800
25006	Ornamental	80.00	600
49007	....do	300.00	900
49006	Ornamental pattern	300.00	900
	Total	5,585.00	.....
	Postage and insurance	63.50	.....
	Total	5,648.50	.....

KOLN, *March 7, 1920.*

The ROSSBACH ART GLASS CO., *Columbus, Ohio:*

According to your wishes, I present you a collection of sketches with the lowest prices figured. I selected different architecture, to the different subjects, from which you can make your offering.

The modern art of glass painting is richer and more ornamental. Besides, I am using my own technic, which gives every shade of color the highest brilliancy.

First-class artistic execution in all my work is guaranteed, therefore my studios are renowned. I have references from nearly all parts of the world for my high-class work I have done in recent years, therefore I hope that you and I will enter in very lively business transactions.

I will send you, as soon as the work on my new catalogue is completed, several copies, and should you wish to have your name or firm or other text printed on there, please let me know by return mail.

I intended to send the sketches in a more artistic make-up, but was afraid that the transportation would destroy it, therefore I advise you to have them pasted on larger mountings, which will help to improve the sketch.

L. PREEKEE.

Comparative costs of stained-glass windows in America and Germany.

Cost sheet No.	Sketch No.	German cost.		Freights per pounds.	Cost of sketches.	Total cost.	
						German.	American.
		Marks.					
1	49007	90	$1.80	$0.20	$0.12	$2.12	$5.96
2	416007	160	3.20	.20	.16	3.56	11.30
3	418003	160	3.20	.20	.10	3.50	11.25
4	312006	100	2.00	.20	.06	2.26	6.13
5	315004	150	3.00	.20	.21	3.41	17.70
6	315007	150	3.00	.20	.08	3.28	12.72
7	818006	180	3.60	.20	.16	3.96	28.47
8	715006	180	3.60	.20	.12	3.92	19.53

[Da Prato Studios, Jersey City, N. J.]

No. 1. *Sketch No. 49007—Cost estimate—Size, 4 feet 6 inches by 11 feet 2 inches—Total, 51 square feet.*

Sketch		$15.00
Material, antique, $1 per square foot		51.00
Material, antique glass, average $0.78 per square foot:		
Actual glass used	$0.60	
Waste	.18	
Cost of lead per square foot	.07	
Cost of solder per square foot	.03	
Cost of color per square foot	.02	
Cost of cementing supplies per square foot	.02	
Cost of gas consumed per square foot	.05	
Cost of paper for patterns per square foot	.03	
Per square foot	1.00	
Cartooning		15.00
Painting, 51 square feet, at $0.75 per square foot		38.25
Cutting, 51 square feet, at $0.30 per square foot	15.30	
Laying out	7.65	
		22.95
Glazing, 51 square feet, at $0.40 per square foot	20.40	
Burning, 51 square feet, at $0.12 per square foot	6.12	
Cementing, 51 square feet, at $0.08 per square foot	4.08	
		30.60
Cost of box	5.50	
Packing labor	1.56	
		7.06
		179.86
Manufacturing overhead (light, heat, rent, etc.) 30 per cent on labor, $123.36		37.00
Net manufacturing cost		216.86
Selling expense, 20 per cent on $216.86		43.37
Administration, 20 per cent on $216.86		43.37
Net cost, excluding profit, f. o. b. factory		303.60

No. 2. *Sketch No. 416007—Cost estimate—Size, 5 by 9 feet—Total, 45 square feet.*

Scale sketch		$30.00
Material, antique, $1 per square foot		45.00
Material, antique glass; average $0.78 per square foot.:		
Actual glass used	$0.60	
Waste	.18	
Cost of lead per square foot	.07	
Cost of solder per square foot	.03	
Cost of color per square foot	.02	
Cost of cementing supplies per square foot	.02	
Cost of gas consumed per square foot	.05	
Cost of paper for patterns, per square foot	.03	
Per square foot	1.00	
Cartooning		50.00
Painting flesh, seven heads, at $10 each		70.00
Painting drapery, 15 square feet		22.00
Painting field, 30 square feet (matting)		12.00
Cutting figures	20.00	
Cutting field	3.50	
Laying out	6.75	
		30.25
Glazing, 45 square feet, at $0.30	13.50	
Waxing figures	3.00	
Burning, 45 square feet, at $0.10—labor	4.50	
Cementing, 45 square feet, at $0.08	3.60	
		24.60
Cost of box	4.80	
Packing labor	2.08	
		6.88
		290.73
Manufacturing overhead (light, heat, rent, etc.), 30 per cent on labor, $240.98		72.28
Net manufacturing cost		363.01
Selling expense, 20 per cent on $363.01		72.60
Administration, 20 per cent on $363.01		72.60
Net cost, excluding profit, f. o. b. factory		508.21

No. 3. *Sketch No. 418003—Cost estimate—Size, 4 feet 8 inches by 12 feet 9 inches—Total, 60 square feet.*

Sketch		$30.00
Material, antique, $1 per square foot		60.00
Material, antique glass, average 78 cents per square foot:		
Actual glass used	$0.60	
Waste	.18	
Cost of lead per square foot	.07	
Cost of solder per square foot	.03	
Cost of color per square foot	.02	
Cost of cementing supplies per square foot	.02	
Cost of gas consumed per square foot	.05	
Cost of paper for patterns per square foot	.03	
Per square foot	1.00	
Cartooning		70.00
Painting heads, six heads at $10 each		60.00
Painting architecture and field		32.00
Painting drapery		35.00
Cutting figures	28.00	
Cutting architecture	10.50	
Laying out	14.00	
		52.50

Glazing, 60 square feet, at $0.35	$21.00	
Waxing, 60 square feet, at $0.12	7.20	
Burning, 60 square feet, at $0.10, labor	6.00	
Cementing, 60 square feet, at $0.08	4.80	
		$39.00
Cost of box	5.50	
Packing labor	2.08	
		7.58
		386.08
Manufacturing overhead (light, heat, rent, etc.), 30 per cent on labor, $320.58		96.17
		482.25
Selling expense, 20 per cent on $482.25		96.45
Administration, 20 per cent on $482.25		96.45
Net cost, excluding profit, f. o. b. factory		675.15

No. 4. *Sketch No. 312006—Cost estimate—Size, 4 feet 6 inches by 11 feet—Total, 49½ square feet.*

Sketch		$15.00
Material, 49½ square feet antique, at $1		49.50
Cartooning		24.00
Painting flesh, one head		10.00
Painting drapery	$18.00	
Painting surroundings (matting)	12.00	
		30.00
Cutting figure	18.00	
Cutting surroundings	4.65	
		22.65
Glazing, 49½ square feet, at $0.25	12.38	
Waxing figure	1.80	
Burning, 49½ square feet, at $0.08	3.96	
Cementing, 49½ square feet, at $0.06	2.97	
		21.11
Packing, labor	1.56	
One box	5.50	
		7.06
		179.32
Manufacturing overhead (light, heat, rent, etc.), 30 per cent on labor, $124.32		37.30
Net manufacturing cost		216.62
Selling expense, 20 per cent on $216.62		43.32
Administration, 20 per cent on $216.62		43.32
Net cost, excluding profit, f. o. b. factory		303.26

No. 5. *Sketch No. 315004—Cost estimate—Size, 3 feet 3 inches by 5 feet 10 inches—Total, 19 square feet.*

Sketch		$18.00
Material, antique, $1 per square foot		19.00
Material, antique glass average 0.78 per square foot.		
Actual glass used	$0.60	
Waste	.18	
Cost of lead, per square foot	.07	
Cost of solder, per square foot	.03	
Cost of color, per square foot	.02	
Cost of cementing supplies	.02	
Cost of gas consumed, per square foot	.05	
Cost of paper for patterns, per square foot	.03	
Per square foot	1.00	

Cartooning		$35.00
Painting flesh, four heads at $10		40.00
Painting drapery, including architecture		27.00
Cutting drapery and architecture	$22.00	
Laying out	5.70	
		27.70
Glazing, 19 square feet, at $0.50	9.50	
Waxing, 19 square feet, at $0.15	2.85	
Burning, 19 square feet, at $0.20, labor	3.80	
Cementing, 19 square feet, at $0.10	1.90	
		18.05
Packing, labor	1.56	
Cost of box	3.50	
		5.06
		189.81
Manufacturing overhead (light, heat, rent, etc.), 30 per cent on labor, $167.91		50.34
		240.15
Selling expense, 20 per cent on manufacturing cost, $240.15		48.03
Administration, 20 per cent on manufacturing cost, $240.15		48.03
Net cost, excluding profit, f. o. b. factory		336.21

No. 6. *Sketch No. 315007—Cost estimate—Size, 3 feet 10 inches by 14 feet—Total, 54 square feet.*

Sketch		$50.00
Material, antique, 54 square feet, at $1		54.00
Cartoon		60.00
Cutting figures	$40.00	
Painting flesh, two heads at $8	16.00	
		56.00
Painting drapery, 37 square feet		42.00
Painting architecture, 17 square feet		21.25
Cutting figures	40.00	
Cutting architecture	5.10	
Laying out	10.80	
		55.90
Glazing, 54 square feet, at $0.50	27.00	
Waxing, 54 square feet, at $0.12	6.48	
Burning, 54 square feet, at $0.14	7.56	
Cementing, 54 square feet, at $0.08	4.32	
		45.36
Packing labor	2.08	
Packing lumber	4.00	
		6.08
		390.59
Manufacturing overhead (light, heat, rent, etc.), 30 per cent on labor, $332.59		99.78
Net manufacturing cost		490.37
Selling expense, 20 per cent on $490.37		98.07
Administration, 20 per cent on $490.37		98.07
Net cost, excluding profit, f. o. b. factory		686.51

No. 7. *Sketch No. 818006—Cost estimate—Size, 3 feet 2 inches by 23 feet 3 inches—Total, 74 square feet.*

Sketch		$100.00
Material, antique, $1 per square foot		74.00
Material, antique glass, average $0.78 per square foot:		
Actual glass used	$0.60	
Waste	.18	

Material, antique, $1 per square foot—Continued.		
Cost of lead, per square foot	$0.07	
Cost of solder, per square foot	.03	
Cost of color, per square foot	.02	
Cost of cementing supplies, per square foot	.02	
Cost of gas consumed, per square foot	.05	
Cost of paper for patterns, per square foot	.03	
Per square foot	1.00	
Cartooning		$270.00
Painting flesh, 25 heads at $10	250.00	
Painting corpus	20.00	
		270.00
Painting drapery		160.00
Painting architecture		45.00
Cutting figures	140.00	
Cutting architecture	35.00	
		175.00
Glazing, 74 square feet at $0.60	44.20	
Waxing, 74 square feet at $0.12	8.88	
Burning, 74 square feet at $0.20 (labor)	14.80	
Cementing, 74 square feet at $0.08	5.92	
		73.80
Packing lumber, one box	6.00	
Packing labor	2.60	
		8.60
		1,176.40
Manufacturing overhead (light, heat rent, etc.), 30 per cent on labor, $1,096.40		328.92
		1,505.32
Selling expense, 20 per cent on manufacturing cost $1,505.32		301.06
Administration, 20 per cent on manufacturing cost $1,505.32		301.06
Net cost, excluding profit, f. o. b. factory		2,107.44

No. 8. *Sketch No. 715006—Cost estimate—Size, 105 by 138 inches—Total, 100½ square feet.*

Sketch		$125.00
Material, antique, 100½ square feet at $1		100.50
Material, antique glass, average $0.78 per square foot.		
Actual glass used	$0.60	
Waste	0.18	
Cost of lead, per square foot	0.07	
Cost of solder, per square foot	0.03	
Cost of color, per square foot	0.02	
Cost of cementing supplies, per square foot	0.62	
Cost of gas consumed, per square foot	0.05	
Cost of paper for patterns, per square foot	0.03	
Per square foot	1.00	
Cartooning		225.00
Painting flesh, 19 heads at $10	190.00	
Painting flesh, 6 heads at $8	48.00	
		238.00
Painting drapery and architecture		150.00
Cutting, 100½ square feet at $1.23	123.13	
Laying out, 100½ square feet at $0.40	40.20	
		165.30
Glazing, 100½ square feet at $0.50	50.25	
Waxing, 100½ square feet at $0.12	12.06	
Burning, 100½ square feet at $0.14	14.07	
Cementing, 100½ square feet at $0.08	8.04	
Packing labor	4.68	
Two boxes	12.00	
		16.68
		1,104.90

Manufacturing overhead (heat, rent, light, etc.), 30 per cent on labor $902.40	$297.72
	1,402.62
Selling expense, 20 per cent on $1,402.62	280.52
Administration, 20 per cent on $1,402.62	280.52
Net cost, excluding profit, f. o. b. factory	1,963.66

BRIEF OF THE NATIONAL ORNAMENTAL GLASS MANUFACTURERS' ASSOCIATION OF THE UNITED STATES.

This organization is an association of the ornamental glass manufacturers of the United States, and realizing the necessity of protection to the stained-glass industry, to meet competition of European labor, they respectfully submit the following information and argument:

Under section 95, act of 1913, this window glass and glass windows received a protection of 30 per cent ad valorem; under the act of 1909, paragraph 100, 45 per cent ad valorem; under the act of 1897, section 112, 45 per cent ad valorem; under the act of 1894, section 102, 35 per cent ad valorem; under the act of 1890, section 122, 45 per cent ad valorem; and the same tariff under section 143, of the act of 1883.

At the time these tariffs were enacted the wage rates in United States were very much less than the wage rates now being maintained, and at that time the value of the mark and all other foreign currency was much higher than it is to-day.

From information received from persons engaged in this trade in Germany, we are informed that the present wage of the average man engaged herein is 48 marks a day, which with a present quotation of 1.87, makes his salary in American coin about .72 cents; men doing similar work in this country are receiving $8 a day. There have been offered in evidence certain exhibits and certain photographs of German windows, prices of which are being quoted on the American market. A table of comparative costs has been previously furnished. These prices may be paid in marks, which makes a 31 per cent reduction again.

At the request of a member of the Committee on Ways and Means, we will endeavor to secure for you a comparative statement of the cost of these windows in countries other than Germany. There is little competition except from Germany, England being the other competitor.

The American cost of manufacturing these windows is set forth in detail in cost sheets 1, 2, 3, 4, 5, 6, 7, and 8, which sheets bear in addition to such numbers the sketch or window number and there also has been offered in evidence photographs of sketches of these windows bearing the numbers referred to, which sheets are in the record of the hearing on Schedule B, January 10, 1921.

In all of the cost sheets the labor item is the great item of expense; therefore, the difference between the foreign wage rate as controlled by the present depreciated foreign exchange necessarily affects the cost of windows; in fact, at least 70 per cent of the bench cost is labor; for instance, sketch No. 4907, showing a net cost excluding profit of $803.60, has a material cost including the packing box of $66; No. 41607, has a material cost including packing box of $49; the net cost of said window is $508.21; window No. 418003, having a net cost of $675.15, has material charges including packing box of $65.50; sketch No. 312006, having a net cost of $308.26, has a material cost of $55, including packing box; window No. 315004, costing $336.21, has a material cost including packing box of $22.50; window No. 315007, with a net cost of $686.51, has a material cost including packing box of $58; window No. 828006, with a net cost of $2,107.44, has a material cost including packing box of $80; window No. 715006, with a net cost of $1,963.66, has a material cost including packing box of $112.50.

This, I think, clearly shows that the great item of cost is labor, and the purpose of the tariff is to protect labor and maintain the high standard of living now enjoyed by the American workingman.

The comparative labor costs in America and Germany will be found in Mr. Nadler's statement of January 10.

The loss in value of the mark in a foreign exchange has greatly aggravated the conditions of competition which the American factories must meet; to say that the wages have been increased in foreign countries is merely saying that they are receiving more of a certain kind of coin, but not more in gold value, for as shown by the exhibits and the testimony of witnesses, the German manufacturer, particularly, is quoting these windows at the advanced rate of 180 marks, but immediately translating 180 marks into $3.60 enables him to put the window on the American market at a price far lower than he has been able to do heretofore.

This industry in America, in the absence of competition, made great advances, both financially and in the grade of its work. On account of the destructive influence of foreign competition, this is truly an infant industry and one that is entitled to protection. The workmen are highly skilled, there being no machinery used and no method of labor saving possible; therefore, the handworker is brought into direct competition with the low price handworker in Europe.

The reason why the American manufacturers have been able to proceed is that during the war, importation, except from England, was impossible; a great center of competition has been Belgium, Germany, and Bohemia; particularly, however, Germany. The shortage of coal and chemicals in continental Europe necessary to the manufacturing of glass has continued this protection which the war afforded since the close of the war, and if this were not true, there would be but few American ornamental glass manufacturers left today to ask your assistance; but the coal and chemical situations are rapidly approaching normal, and competition will be in full swing; in fact, we are informed that even to-day German manufacturers have secured orders from America for windows to an amount upward of $500,000,000, and if they could make immediate deliveries these figures would run into many millions and would leave thousands of American employees without a means of existence. Another hardship the American manufacturer of ornamental glass must endure is while there is not a single manufacturer in America of the glass used in these windows, the window manufacturer is required to pay the 30 per cent tariff on his raw material, while the window assembled in Germany may be imported for religious purposes free, and the great bulk of the business is for religious or semi-religious institutions.

We have taken this matter up with representatives of churches that use these windows, and we find no opposition to the placing of a tariff upon them and their removal from the free list, nor do we think there should be any opposition, for America is certainly entitled to have developed within her borders, industries of all kinds and no one should ask in order to secure lower prices, that American labor should be unemployed, while Germany and other manufacturers control our source of supply.

On account of the uncertainty and low value of the mark, it is hard to suggest to the committee what tariff should apply, but we respectfully submit that the tariff should be such as to permit the American manufacturer to meet the German competitor on an even basis. The photographs which have been submitted to you are photographs of sketches of windows which were forwarded to this country by German manufacturers. The prices of the German product are those submitted by German manufacturers; the figures submitted by the American manufacturers are the cost to reproduce these windows in America. These items of costs have been fully explained to you in the testimony of witnesses. Having in mind the sources of the two costs, we would ask that the tariff which you fix be of such nature as to protect, for while at the present rate of the mark, the tariff would have to be enormous, it may later be different.

I am referring to the mark, because our principal competitor is Germany; we would therefore suggest that this tariff be based on an ad valorem basis, plus a tariff of so much per square foot; the per-square-foot tariff is necessary, for as the foreign exchange falls, it becomes possible for our competitors to produce the articles cheaper, an ad valorem reduces the tariff; therefore, a per foot tariff should be placed on it; or such other tariff will be made that will protect against the low exchange. This tariff should be of such amount as I have stated before to permit our competition with the foreigner. The difference in German and American cost on the highest priced window is about $23 per foot; if a number of windows were made off the same sketch, it would, in some cases, reduce the cost about 10 per cent.

We would suggest that the duty on stained glass or painted windows and parts thereof be fixed at 290 per cent, based on an exchange value of 2 cents per

mark, and that either by a differential which will apply to all imports from foreign countries, or by a special system applicable to stained or painted glass windows and parts thereof, only; this rate should be changed to afford an equal protection if the rate of exchange increases or decreases. This means that when foreign prices are quoted in dollars that they be changed into marks at current exchange and that then the value of the market current rates be ascertained to find what rate should apply.

Our object is to secure protection only to the extent necessary to offset the difference in cost of production in this country and in the country of original production.

We would also ask that section 655 of the present act be amended to read as follows:

"Works or art, production of American artists residing temporarily abroad, or other works of art, including pictorial paintings, on glass, imported expressly for presentation to a national institution or to any State or municipal corporation or incorporated religious societies, college, or other public institution, excluding stained or painted window glass or stained and painted glass windows, and excluding any article in whole or in part, molded, cast, or mechanically wrought within 20 years prior to importation, but such exemption shall be subject to such regulation as the Secretary of he Treasury may prescribe."

As it has ever been the policy of the Republican Party to keep such windows as these off the free list, giving them the tariff that was at that time protective, we sincerely hope and request that this policy will be continued, by taking these windows off the free list and place upon them a tariff which will be protective in view of the conditions as they now exist.

OTTO W. HEINICKE,
Chairman Tariff Committee.

MARBLE.

[Paragraphs 97 and 98.]

JOHN S. SEWELL, REPRESENTING THE NATIONAL ASSOCIATION OF MARBLE DEALERS, MUNCIE, IND.

Mr. SEWELL. Mr. Chairman, I am personally president of the Alabama Marble Co. My present residence is at Muncie, Ind., but I appear here to represent practically the entire marble-producing industry of the United States, and also the National Association of Marble Dealers.

We respectfully request that the tariff on imported marble and onyx blocks, including breccias and those limestones that are susceptible of polish and that are actually used as interior marbles, be restored at least to the figure that prevailed before the passage of the tariff act of October 3, 1913. That prior rate was 65 cents per cubic foot. As a matter of fact, a tariff of $1 per cubic foot would leave us at this time at a greater disadvantage with reference to imported blocks than we were when, prior to the act of October 3, 1913, the tariff was 65 cents per cubic foot. The duty under the act of 1913 is 50 cents per cubic foot.

We also respectfully request that the duty on these same materials in the form of sawn slabs be increased at least to the figures prevailing before the act of October 3, 1913 (that is, sawed or dressed over 2 inches in thickness, $1 per cubic foot; slabs not more than 1 inch in thickness, 8 cents per superficial foot; slabs more than 1 inch and not more than 1½ inch, 10 cents per superficial foot; slabs more than 1½ inch and not more than 2 inches, 12½ cents per superficial foot. If rubbed in whole or in part, 2 cents per superficial foot in addition to all of the above). As in the case of blocks, dou-

bling the duties levied by the act of 1913 would not restore us to the relative competitive status which we enjoyed before and which was really necessary to the proper development of our industry.

We recognize the justice of reasonable protection to the marble-manufacturing interests of the United States and we believe that they are entitled to an increase of duty on manufactures of marble proportionate to the increases which may be granted on blocks and slabs.

We have here a memorial with a copy for every member of the committee in which we set forth our reasons for this request in more detail, but I desire simply to bring out the salient points.

In the first place, the American producers, with an annual pay roll due to their operations of certainly not less than $25,000,000, and probably more than that, including active operations in Vermont, Massachusetts, New York, Georgia, Alabama, Tennessee, Missouri, Kansas, Minnesota, Texas, New Mexico, Utah, California, and Alaska.

In the first place, all of the imported marble, practically, is used for interior work. Only a portion of the total American production is used for interior work. All that we are asking for is a tariff on this marble used for interior work. I will say that the marble suitable for interior work is the highest priced of all. Most of the imported marble comes from Italy. The geological conditions, their rates of pay, and things of that sort, give them a great advantage over the American producers in producing marble of a grade suitable for interior work.

Mr. HAWLEY. Is the marble in this country as good for interior work as the Italian marble?

Mr. SEWELL. It is; yes, sir.

Mr. GARNER. How much is consumed in this country per annum?

Mr. SEWELL. Somewhere between 1,200,000 and 1,500,000 cubic feet of marble is used for interior work in this country each year.

Mr. GARNER. But the total amount of marble used in this country per annum.

Mr. SEWELL. That will vary from, say, 3,000,000 cubic feet to 4,500,000 cubic feet, depending on circumstances.

Mr. GARNER. How much is imported?

Mr. SEWELL. About between 600,000 and 700,000 cubic feet is the normal yearly importation. The interior marble in this country is about equally divided between domestic and imported marbles. It is very doubtful whether if you quadruple the present rates it would prohibit the importation by 1 cubic foot. The marble is sued for decorative purposes. The question of which marble is used is a matter of taste, and the people who select the particular marble do not care very much whether they pay $1 a cubic foot or $5 a cubic foot for the marble produced and set in place.

Mr. GARNER. Does it not depend very largely on the archiect as to what kind of marble is used?

Mr. SEWELL. Yes, sir. He is the gentleman whose taste usually governs. If he specifies for you an expensive Italian marble, that means he does not care whether you pay $20 or $40 a cubic foot for that marble set in place. As a matter of fact, the tariff on marble has never had any actual influence on the importation. We don't want

the imported marble driven out of the country, but we do think that we should have a tariff on it that would put us somewhere on a competitive basis with them. The natural effect of that would be to cause a slight increase in the prevailing price of interior marble. That little increase for the American producer will make it possible for people to buy marble for monumental and exterior work at a more moderate price than they could otherwise. We could prove that by actual figures if the committee wants it.

Mr. GREEN. How do you distinguish between marble for interior work and that which is to be used for exterior work?

Mr. SEWELL. You mean in the imported marble?

Mr. GREEN. How could we distinguish it in the law so that we would know how to apply it?

Mr. SEWELL. We have given you the definition in our memorial. Any imported marble, any onyx blocks, including breccias and those limestones that are susceptible of polish and are actually used as interior marbles. There is no question about defining in any individual case.

Mr. GREEN. There will be no trouble about it?

Mr. SEWELL. No.

Mr. GARNER. Your idea in suggesting an increase is merely to get more money in the Treasury and let these rich people use that marble?

Mr. SEWELL. Also to help the American producers to conduct their business under better conditions.

Mr. TILSON. The present duty is 65?

Mr. SEWELL. If it is a question of revenue only, I suggest the duty be raised up as high as 2½, because I don't believe that will keep the marble out, if it is a question of revenue. It is true that a tariff many times more than we have asked for will give the United States more revenue than it has ever collected on imported marbles. I would also like to make a plea for a duty on manufactured marble. You understand that some of the American manufacturers would like to have the imported blocks on the free list, but I think their attitude on that subject is very much like the railroads when they used to oppose the development of canals. Now the railroads would like to have the canals developed, because they produce a low-grade traffic and they are feeders to the railroads of high-grade traffic. If the American marble business develops they will go ahead and enlarge the market for all kinds of marble in this country, and the importers will actually in the end get their part of it.

Mr. TREADWAY. This imported marble is marble for statuary and things like that?

Mr. SEWELL. Yes, sir; for altars and things like that.

Mr. TREADWAY. That is out of the building class?

Mr. SEWELL. Yes, sir; out of the building class.

There is a business amounting to from one million to several million dollars a year in the importation of these manufactured articles, and they are very frequently imported here as works of art. We have nothing to say against the importation of genuine or original works of sculpture free of duty, if you like, but the great majority of this work that comes in is of purely the conventional character. There is not any of it that can not be equaled by the workmen of this country, and it makes no difference whether it is made out of domestic

or imported marble. Manufacturers and workmen in this country can produce it just as good as the best and a good deal better than much that comes from Italy.

The CHAIRMAN. What, if any, by-product do you have?

Mr. SEWELL. Nearly all of us are able to sell the waste marble in crushed form for use in terrazzo floors, and lately there has come to be some demand for it for stuccowork in houses, and there are a few of us here and there who make a little of it into lime.

The CHAIRMAN. Do you grind any of it into flour?

Mr. SEWELL. To a limited extent it is pulverized to a fine degree and sold for agricultural purposes, just as ground limestone is, but not to a very great extent. My own company, down in Alabama, which has a deposit which yields a great deal of waste, has sold marble for all of those purposes, except we never have burned any of it into lime.

The CHAIRMAN. Is your industry in Alabama near Birmingham?

Mr. SEWELL. Yes, sir; about 50 miles from Birmingham.

The CHAIRMAN. Did you ever sell it to the sugar manufacturers—sugar refiners?

Mr. SEWELL. No, sir; because they wanted it burned, and we have never felt justified in going into the lime-burning business. We did not know anything about it.

The CHAIRMAN. I was in Birmingham at one time and it was pointed out to me that one industry shipped ground marble to the American Sugar Refining Co.

Mr. GARNER. And they mix it with the sugar?

The CHAIRMAN. They mix it with confectionery sugar.

Mr. SEWELL. If any Alabama marble has been mixed with sugar marketed in this country it has been done by the sugar men and not by the marble people.

The CHAIRMAN. I am serious about this matter. I have a letter offering me ground marble to mix with flour and guaranteeing me $400 to $600 profit per carload, and furnishing a mixing machine free of cost to mix it with.

Mr. SEWELL. Nobody has offered to sell me a plant to do that, sir. I don't know anything about it. It is a subject on which I am entirely ignorant.

Mr. RAINEY. Long prior to the passage of the pure food law it might have been mixed with flour.

The CHAIRMAN. I differ with you. It has been since the pure food law became an act. I talked with Dr. Wiley about it, and he says it is not a violation of the pure food law, because it is not unwholesome.

Mr. SEWELL. I am quite sure the marble industry in this country is not engaged in any such commerce.

Mr. RAINEY. I don't think Dr. Wiley said that.

The CHAIRMAN. I beg to differ with you. I am sincere about it. It can be done and has been done.

Mr. GARNER. I want to defend Dr. Wiley. I think the chairman misunderstood him, because I don't believe Dr. Wiley could have seriously made the statement that flour made out of marble is not unwholesome.

The CHAIRMAN. You will find that in his testimony before this committee.

Mr. GARNER. Not by Dr. Wiley.

The CHAIRMAN. Yes; Dr. Wiley so testified, according to my recollection. I may be mistaken. I am not quite positive it was Dr. Wiley; it may have been somebody else.

Mr. RAINEY. You won't find that he said that.

The CHAIRMAN. I know it, because you were in favor of mixed flour and I was opposed to it.

Mr. GARNER. You don't care for any duty on it for the purpose of mixing it with flour, do you?

Mr. SEWELL. No, sir. If that was the purpose for which it was being used, we would not fear any competition at all.

Mr. HADLEY. Does your brief deal with monumental marble?

Mr. SEWELL. Yes, sir.

Mr. HADLEY. And the rates you have discussed apply to that?

Mr. SEWELL. Any rates you name would probably apply to any marble imported for that purpose, but, as a matter of fact, these imported marbles will not stand exposure to the weather in this climate, and they are not used for monumental work and they are not used for any exterior building work. If we can have the tariff that we have asked for these interior marbles, that will give us satisfactory protection against those others. We only want to be on a competitive basis. We don't want to cut these other marbles out, but when the tariff is too low they get an advantage of us that we think is a little more than they ought to have.

Mr. HADLEY. I wonder whether your definitions would apply to the character of marble I refer to?

Mr. SEWELL. Yes, sir; they would.

The CHAIRMAN. Then you are of the opinion if the rates were increased on all of the marbles suggested by you it would not preclude their importation, but would yield greater revenue?

Mr. SEWELL. It would give greater revenue and not diminish importations. I think you would have to go above $2, probably, per cubic foot, Mr. Chairman, before you seriously interfered with the importation of marbles.

Mr. GARNER. Your industry is in Alabama?

Mr. SEWELL. Yes, sir.

Mr. GARNER. I notice that they are usually reasonable. [Laughter.]

Mr. SEWELL. Practically all of the marble blocks imported into this country are used for interior work; the question, therefore, lies directly between all of the imported marble on the one hand, and that portion of the domestic production that is used for interior work, although the market for domestic marble for other purposes is also involved—as will be shown.

The marbles imported into this country comprise various grades of white marble, a considerable variety of richly-colored fancy marbles, and a number of varieties of so-called monotone marbles, which are generally of some shade of buff or gray. With the exception of a certain few of the fancy marbles, breccias, and marbles with richly-colored veins, which are peculiar in their markings and coloring and used only to a slight extent, this country produces fair equivalents for every imported marble. Not only is the American marble usually a full equivalent of its imported rival in its decorative possibilities but in every other respect, such as hardness, durability, strength,

polishing qualities, resistance to staining, etc., it is almost always superior. But the selection of a decorative marble is a matter of taste, with which it is useless to find fault. Many architects in this country prefer the imported marbles of the same class to the domestic marbles; there is always the lure of the thing imported from a far country. For this and other reasons we do not believe that any tariff of any thinkable amount will keep the imported marbles out nor greatly diminish their quantity as compared with the domestic marbles used for interior work. We do not desire to keep them out, but we do not wish them to drive us out of the interior market. They have a market of their own within which the duty paid on them is a negligible consideration. Doubling the present duty would not diminish their use, and putting them on the free list would not increase it if the domestic producers were able to compete with them under such conditions.

Interior marble has its structural and sanitary purposes, but its principal use, and that is particularly true of imported marbles, is for ornamental purposes in the more elaborate and expensive buildings. It belongs, therefore, more to the class of luxuries.

The present tariff on imported marble blocks does not amount to more than 2 per cent of the price currently paid for the finished material set in place. The cost of interior marble in an office building or hotel rarely amounts to 5 per cent of the whole; in apartment houses it is much less. Doubling the present tariff on marble would add not over one-tenth of 1 per cent to the cost of the most luxurious buildings in which it is used. The effect on rentals would be practically nil.

We maintain, therefore, that imported marble is particularly a material upon which revenue should be raised, for the records of importations of marble show very clearly that the revenue derived from the tariff on marble has been directly proportional to the tariff itself, the total amount imported having been practically independent of the tariff.

Most of the marble blocks imported into this country come from Italy; the principal producing center there is the Carrara district. In 1913, from the best information obtainable, there were 722 quarries in the Carrara district; the capital invested was estimated at $32,629,000. At the same time the capital invested in American producing companies was not less than $50,000,000, and they included operations in Vermont, Massachusetts, New York, Georgia, Alabama, Tennessee, Missouri, Kansas, Minnesota, Texas, New Mexico, Utah, California, and Alaska.

The capital of the American producers is largely invested in fixed form and is absolutely dependent for its continued vitality upon a permanent and stable market for the product of the American quarries. The capital of the importers of foreign marbles is largely represented by marble on hand and by facilities for handling and storing it. Capital in this form is easy to liquidate and transfer to other purposes. The capital of the American producers is tied down to their quarries and machinery, often in locations which are justified only by the existence there of their deposits. Unless the deposits can be worked the fixed investment is almost a total loss.

In Italy the marble forms the backbone of a range of mountains; it outcrops at and near the summit. As a result it can be quarried

by the use of explosives at a very low cost without risk of injuring either the marble blown down or that remaining in place. The very process of quarrying opens up all the natural cracks or unsoundness, as the quarryman calls them, separating the good from the bad. Moreover, the variations in ground, tone, veining, and clouding occur so gradually that any sound block will be all of one variety or grade. Nothing remains but to roughly square them up and the blocks are ready for the mill.

In this country the marble lies under the floor of the valleys; or, if it is in the hills, it is often covered to a great extent with other rock. Explosives can not be used. The stone must be cut out by means of channeling machines and drills. The unsound marble must be taken out with the sound, and it costs as much, if not more, than the sound. A certain percentage of the product, varying from 20 to 60 per cent, manifestly worthless, goes at once to the dump. Of the remainder, a percentage is always worthless, but can be determined to be so and separated from the good only by sawing. Every cubic foot sent to the dump after sawing represents an additional direct expense and further reduces the final net yield. Included in this net yield are often several varieties or grades which have to be separated and classified slab by slab and a market found for each.

Since 1913 costs have greatly increased. In this country they have more than doubled. Assuming that quarrying costs in Italy have quadrupled, that the Italian quarryman still sells on the same percentage of profit, but taking account of the present rate of exchange, the increase in the cost of Italian blocks laid down in New York should not have been increased by more than 30 per cent. Even with an additional tariff of 50 cents per cubic foot the increase in cost to the importer will not exceed on the average 50 per cent, as against more than 100 per cent increase for the American producer.

The increase in freight rates on marble in this country over those prevailing in 1913 amounts to at least 40 per cent; the increase in ocean freights on marble blocks is not more than 33⅓ per cent.

From 1910 to 1914, inclusive, the importation of blocks of foreign marbles amounted to an average of 652,000 cubic feet per year. The average yearly consumption of domestic interior marbles for the same years, as reported by the Geological Survey, was about 463,000 cubic feet. But of marble reported as sold in the rough to manufacturers during the same years, probably about 200,000 cubic feet were actually used for interior work, making the average total consumption of domestic marbles for this purpose about 663,000 cubic feet.

The use of both foreign and domestic materials went up and down together, depending upon the activity of building work. The tariff had no perceptible influence. Beginning with 1915 the industry was disrupted by war conditions, and it has not yet returned to normal.

During the years 1910–1914, inclusive, the average yearly production in this country for all purposes was about 4,500,000 cubic feet. Most of it was used in the monumental trade and for exterior building work. Here is where the poor man comes in as a customer for the marble trade. Marble costs more to produce than granite, but is less expensive to work, so marble is the poor man's gravestone. Along with the grades of domestic marble produced for interior work, must be produced other grades which are well adapted for monumental work but which are not suitable for interior building work. These

grades are sold in the monumental trade at very close figures. This is made possible only by the relatively high prices obtainable for the interior work. A serious diminution in these prices would mean an increase in the prices of the less expensive monumental work, or else the partial shutting down of certain large operations which now employ thousands of men. To a less extent, perhaps, but no less certainly, the marble used for exterior work is sold on a close margin because of the relatively high price of interior marble. The imported marbles can not safely be exposed to the weather in this country, and they could not compete with the domestic marbles for this purpose, even if equal to them in durability and duty free. But the tariff on them makes closer prices on all outside work not only possible but an actual fact.

At every stage of its progress from the deposit in the ground to its final resting place in the building or the cemetery, the value of marble is 75 or 80 per cent, labor directly applied; not to speak of the labor indirectly represented in the supplies used in quarrying and subsequent processes.

Profits have been conspicuous chiefly by their absence. The development of a new marble property to a point where it can be depended upon to yield a certain average amount and percentage of merchantable stock from year to year is the work of a life time. Until that stage is reached, every penny earned over expenses must be reinvested in the business; otherwise, a run of a few months of bad luck in one or two quarries may result in bankruptcy; even the most prudent management has not sufficed to prevent the failures from being more numerous than the successes. The amount of capital lost in the business is unbelievably large, considering the volume of the business itself.

The marble-producing business in this country is about 75 years old. Only recently can a few of the largest companies feel that they are finally on a secure basis. The value of marble in the ground, undeveloped, is not much and even after expensive development its value is relatively small. The greater part of the value and cost of marble blocks and slabs is labor applied directly in the industry.

The reward that justifies the time and capital put into the business is the fact that once the physical properties are adequately developed, the business is one of great stability and permanence; but this is the work of a lifetime, and the pioneer who starts it rarely finishes it. The Italian quarries have been operated for 3,000 years. They contain many properties that have been adequately developed for generations. They long ago left behind them most of the troubles that still confront the American producers. The total annual pay roll due directly or indirectly to the American marble-producing industry is probably not less than $25,000,000. More than half of it is due to the monumental and exterior branches of the trade; a reasonable tariff on imported marbles is reflected many times over in this volume of wages, besides being a source of direct revenue of the United States.

Some of the manufacturers in the United States would like to see marble on the free list. Their attitude is somewhat similar to that of the railroads in their former resistance to the development of navigation, trolley lines, and other subsidiary means of transportation. As a matter of fact, the American producers with their lower

and medium grades of interior marble, have been educating new communities to the desirability of marble for toilet rooms, hotel lobbies, small banking rooms, etc. They are entering fields not now open to the higher priced marbles, whether domestic or imported; but in time the demand for the higher grades will develop, and then the imported marbles will get their share. In short, with a reasonable tariff in their favor, the American producers will gradually enlarge the market for imported marbles as well as their own, whether they desire to do so or not.

All the arguments for a tariff on blocks apply with equal force to unfinished marble in any intermediate stage.

Article.	Rate of duty.	Quantity.	Value.	Value per unit.	Computed ad valorem rate.
Year ending June 30, 1913:		*Cu. ft.*			*Per cent.*
Blocks	20.65 cu.	631,352	$983,652	$1.56	41.72
Sawed	1.00 cu.	11	27	11.25	41.60
Slabs	.06 sup.	161,878	31,462	.19	41.16
Year ending June 30, 1915:					
Blocks	.50 cu.	470,555	716,164	1.53	32.85
Slabs	.06 sup.	180,621	31,415	.17	34.50
Year ending June 30, 1916:					
Blocks	.50 cu.	189,944	326,245	1.73	29.11
Slabs	.06 sup.	47,211	10,254	.22	27.62
Calendar year 1919:					
Blocks	.50 cu.	209,945	593,340	2.84	17.69
Slabs	.06 sup.	74,680	17,896	.24	25.04
To Sept. 30, 1920:					
Blocks	.50 cu.	332,299	894,557	2.69	18.6
Slabs	.06 sup.	30,412	16,555	.54	11.0

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

Few other lines of importation have been so severely affected by the war as marble. The suspension of building operations during the war period, which are necessarily resuming at a much reduced rate in its aftermath because the readjustment from war to peace conditions, does not find the most favorable conditions to the long investment of capital required in building enterprises, together with the unsettled conditions of shipping during and for some time after the war, the lack and high cost of labor, the greatly increased cost in all items of unavoidable outlay, and in brief the general upset conditions and difficulties experienced during the eventful years that followed the last revision of the tariff, have kept the marble business practically at a standstill.

The statistics of importation give ample evidence of this unsatisfactory condition. While in the fiscal year 1914 marble and manufactures thereof subject to duty were imported for a total value of $1,335,672, importations have gradually decreased in the fiscal year 1915 to $894,538; 1916, $728,693; 1917, $659,074; 1918, 422,287; 1919, $288,953; and although in 1920 there has been some resumption, trade is still far from anything like a return to normal conditions. But even a return to prewar figures would not imply any flourishing condition, because at that time were already evident the effects of the increasing production of domestic marble in limiting the use of the foreign article to where it could not be substituted by the domestic. So it was that while the quarrying and working of domestic marble increased its output from a total value of 64 million dollars in 1899 to one of 113 millions in 1909, and has kept pretty steady since, with 107 millions in 1914, in spite of the outbreak of the war, to which it is undoubtedly due the slight contraction reported at the census of 1914, importations of marble, supplied four-fifths by Italy, fluctuated annually between 1½ and 1¾ million dollars. There has not been for this source any substantial gain even when conditions were normal from the increased use of this noble building material to which modern architecture and the improving artistic education of the American people in conjunction with their greater means are

finding new applications in increasing the beauty and comfort of their homes as in the decoration of those majestic buildings which the practical trend of American art and the responsiveness of American capital have raised to the constructive pursuits of commerce in the great cities of our country.

While this chamber does not ignore that war conditions have affected domestic production, it can not at the same time overlook another fact, quite as evident and important, namely, that the marble industry in Italy has been by far the greater sufferer from the war, its output of 357,000 tons in 1914 having been reduced to 200,000 in 1915, to 171,000 tons in 1916, and to only 134,233 tons in 1917. The marble business has been even more depressed in 1918 and 1919, for which statistics are not yet available, except those of total exports from Italy to all destinations, which were as follows:

Calendar years:	Tons.	Calendar years—Continued.	Tons.
1913	317,392	1916	118,634
1914	260,530	1917	80,898
1915	128,836	1918	50,656

In these amounts the United States participated, according to official Italian statistics, in the following proportions:

	1919	1918	1917	1916	1915	1914	1913
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Block marble	19,264	7,986	17,063	26,865	24,382	48,604	52,434
Sawed in slabs less than 6/4 inches thick	7,457	7,811	14,046	10,484	9,240	20,128	29,292
Otherwise sawed or prepared	4,782	7,614	14,190	21,894	18,217	22,057	27,401
Paving tiles	.....	463	.....	1,141	.....	.....	.....
Total	31,503	23,874	45,296	60,384	51,839	90,789	109,177

These figures show conclusively the depressed conditions of the marble industry in Italy, exports on the whole having been in 1918 less than one-sixth what they were before the war and those to this country less than one-fourth.

Quarrying reduced to one-fourth or to one-fifth of its former output and the equivalent loss of trade have not been the only disastrous effect of the war on this industry, but no less prejudicial has been the greatly increased cost of production. This is due to far greater wages paid to labor, which have gone up five or six times their value in lire in comparison to their pre-war level, a cutter for instance, who used to be paid 6 lire per day's work in antebellum days, being now unobtainable for less than 30 lire for an eight instead of nine hour day's work. Also to much higher freights, both railroad and maritime, the former having doubled and the latter increased 60 per cent, namely, from 25 to 40 shillings per ton. Likewise to the greatly augmented cost of hauling the marble from the quarry to railroad station, which is still carted by ox wagons on account of no other available means of conveyance. And, last but not least, on account of the much higher cost of materials in general, such as machinery, tools, wagons, etc., which has gone up in even greater proportion.

While this chamber does not ignore that some similar increases have taken place in this country as well as a consequence of war conditions, they have, however, affected less the cost of production here, because of the more progressive methods of quarrying obtaining in the marble district of the United States requiring far less labor and making for more efficiency. It should also be remarked that the increase in the cost of labor, as well as in some other item can not be faithfully represented by reporting it in its equivalent in gold standard currency, because of the factor of great instability of the exchange rate. Some of the most striking accentuations in the cost of labor have been a matter of comparatively recent date, namely, since last October, in consequence of the labor troubles experienced about that time.

Under these conditions it is not to be wondered at that the cost of ordinary white Carrara marble in Italy has now increased to such figure that it can not be laid down for less than $3 per cubic foot f. o. b. Leghorn. This figure has to be further increased by 65 cents for freight, 15 cents for lighterage, and 50 cents for duty, bringing the cost to $4.30, to which, adding 25 per cent profit,

we have the ultimate cost of the marble delivered at New York at $5.35 per cubic foot, against $3.20 paid for domestic marble.

The imported marble also has the disadvantage of the extra hazard and cost of handling as against the domestic, which can be shipped, even in small quantities, from the quarry direct to the consumer.

The margin of at least $2 or over per cubic foot in favor of domestic marble shows that the present rates of duty of 50 cents per cubic foot on marble in block and of 75 cents on sawed or dressed marble are sufficiently protective for domestic industry, which has over the foreign the advantage of lesser cost of production, of freight, and of nearness of supply. They appear also the best for the purpose of revenue, as higher rates would unquestionably adversely affect importation under the present depressed conditions of the industry abroad. War conditions, having set in soon after the application of the present tariff, robbed it of the opportunity of a fair trial.

Owing to the instability of foreign exchange, present conditions are not such as to afford a reliable basis for a computation of the cost or production upon which to base changes in the tariff of a permanent character, a cost which varies with the different foreign marbles according with the greater or lesser facilities of quarrying, the location of the quarries, the distances to be covered in hauling the material from the quarry to the railroad station and from the latter for the port of shipment for the United States, and also according to the different charges for loading obtaining at different ports.

The Italian marble does not enter into competition with the domestic marble. Besides being of higher cost it possesses superior qualities of its own, which make its use invaluable in works of art and especially for statuary, for interior decorations, and in all cases on works of artistic finish. To discourage the importation of this marble would work a great hardship on that element of our people gifted with artistic tastes and interested in works of the "better kind."

For like reasons this chamber recommends that the duty on slabs or paving tiles, which are used by manufacturers not provided with sawmills, be continued at the present rates of 6 cents per superficial foot, slabs of not more than 1 inch in thickness; of 8 cents per superficial foot on slabs of more than 1 inch and not more than 1½ inches in thickness; of 10 cents per superficial foot on slabs of more than 1½ inches and not more than 2 inches in thickness; and on slabs rubbed in whole or in part of 2 cents per superficial foot in addition.

These paving tiles are made from pieces of marble unfit for other purpose and give the consumer here the advantage of a superior article. They are admittedly of better quality or more artistic than any other substitute.

This chamber favors also the continuance of the duty on mosaic cubes at the present rates of 20 per cent ad valorem and 35 per cent if attached on paper, unless the duty can be made specific, which would be preferable, and, instead of 20 per cent on loose mosaic, be fixed at one-fourth of 1 cent per pound. Specific duties are unquestionably the most honest to collect, and it is especially so in the case of an article like marble, as it is difficult to arrive at its true value and is inclined to fluctuate according to the use to which it is put. Mosaic is hardly produced in this country; it has a displacing competitor in ceramic tiles, cheaper in price, but which can not outdo in sanitary advantages, beauty of color and design, and efficiency, as well as lasting quality of decoration, good mosaic work. On terrazzo or granito, which is only the waste débris of the quarry and is not of much value, this chamber is in favor of assessing a specific duty even of $1 per gross ton, instead of the present rate of 20 per cent ad valorem, which is inconsistent with the nature of this material and on which freight charges already afford ample protection to domestic producers. As Carrara granito is essential for the top layer of terrazzo floors and can not be replaced with equal efficiency in this use by the domestic article, its importation should be encouraged both in the interest of the good wearing quality of the floors obtained by its use as of revenue, which would be benefited by an increase in the importations of this material.

C. D. JACKSON, PRESIDENT AND TREASURER OF THE C. D. JACKSON CO. (INC.), NEW YORK CITY.

Mr. JACKSON. My name is C. D. Jackson, representing the C. D. Jackson Co. (Inc.), marble importers.

I prepared a brief which I will submit to the committee.

BRIEF OF THE C. D. JACKSON CO. (INC.), NEW YORK CITY.

One of the undersigned, Mr. C. D. Jackson, appeared and submitted, on January 9, 1913, to the honorable Committee on Ways and Means, House of Representatives, Washington, D. C., a brief.

The facts stated in said brief were based upon an exhaustive study of the conditions existing at that time. The facts submitted were taken in fullest consideration by your honorable board, and it resulted in a revision of the tariff existing at that time, and the adoption of practically all the points which are embodied in tariff act of 1913, under paragraphs 97 and 98.

The war has brought, however, many changes in the cost of production of marble and stone in blocks and sawn slabs in Europe.

The cost of production of marble and stone in the United States did not escape the same fate.

We therefore approach you again in order to lay before you our suggestions, which are based upon the facts and conditions existing at present, and respectfully ask you to take same into fullest consideration.

To get a clear idea, we bring the following facts to your kind attention:

The principal marbles produced and extensively used in the United States are the marbles from Vermont, Tennessee, Alabama, and Georgia.

Further, the limestones of Carthage, Mo., and Phoenix, Mo., both being primary limestone susceptible to polish.

The prices for Vermont marble during the year 1913 were approximately as follows (¼ inch):

	Per square foot.		Per square foot.
Light cloud	$0.40	Extra white Rutland	$0.95
Best light cloud	.50	Standard white	.80
Light Rut. Italian	.60	American Pavonazzo	1.00
Second statuary	.70		

We wish to state that the largest part of the marbles produced in Vermont are sold in sawn slabs.

During the year 1920 the following price list was issued by the Vermont Marble Co., which is still in force (¼ inch):

	Per square foot.		Per square foot.
Light cloud	$0.65	Extra white Rutland	$1.45
Best light cloud	.85	Standard white	.60
Light Rut. Italian	1.10	American Pavonazzo	1.45
Second statuary	1.10		

	Per cubic foot.
Lower grades, viz, marbles from the Danby, Manchester, and Dorset regions, loaded on railroad cars nearest point to quarry, are sold at about	$1.50
Tennessee marbles (loaded on railroad cars, Knoxville, Tenn.):	
First-grade blocks were during 1913	1.50
No. 1 blocks during 1920 are	3.50
Alabama marbles (loaded on railroad cars, quarry):	
During 1913—	
No. 1 blocks were	2.50
Average grade blocks	1.50
During 1920—	
No. 1 blocks are from	$3.50–4.50
Average grade blocks	2.50–3.50
Georgia marbles (loaded on railroad cars, quarry):	
During 1913—	
Best selected quality were	1.30
No. 1 quality	1.05
During 1920, approximately—	
Best selected quality	2.50–3.00
No. 1 grade	2.00–2.35
Carthage marble—limestone (loaded on railroad cars, quarry):	
During 1913—	
Best selected quality were	1.00
Average grade	.65

Carthage marble, etc.—Continued.

	Per cubic foot.
During 1920—	
Best selected quality are	$2.50
Average grade	2.00
Napoleon marble from Phoenix, Mo.—limestone (loaded on railroad cars, quarry):	
During 1913	1.25
During 1920 are	2.50

IMPORTED MARBLES.

For a better understanding we divide the imported marbles into categories, viz:

Category No. 1.—Polishable hard limestone.
Category No. 2.—Ordinary marble.
Category No. 3.—Veined type.
Category No. 4.—Veined statuary type.
Category No. 5.—Low-priced colored marbles.
Category No. 6.—Medium-priced colored marbles.
Category No. 7.—High-priced colored marbles.

During the year 1913 the average prices on rough blocks, small, medium, and large, as produced by the quarries loaded on cars at the railroad station nearest to quarry, were:

	Per cubic foot.		Per cubic foot.
Category No. 1	$0.85	Category No. 5	$1.50
Category No. 2	1.30	Category No. 6	3.50
Category No. 3	2.00	Category No. 7	7.00
Category No. 4	2.40		

The average prices during 1920, taking the present cost based upon the present low exchange rate into consideration, are approximately as follows, loaded on cars at railroad station nearest to quarries:

	Per cubic foot.		Per cubic foot.
Category No. 1	$1.95	Category No. 5	$3.50
Category No. 2	3.00	Category No. 6	5.25
Category No. 3	3.60	Category No. 7	8.75
Category No. 4	4.50		

With rising exchange the cost of these marbles will increase proportionately, and the cost to import same will be considerably higher than the prices indicated above, viz, the prices during 1920.

To the above-named prices has to be added about $1.75 per cubic foot to cover the present United States duty, freights, insurance, hoisting, and lighterage charges.

The present economic conditions existing in Europe are well known to you, and consequently do not require any comment on our part.

The cost of production can not be reduced for years to come; this is based upon personal observation and reliable information received from our personal representatives abroad.

Railroad transportation abroad from quarries to seaport and loading expenses there are six times higher to-day than before the war.

Steamship freight rates are twice and three times higher to-day than before the war.

	Per ton.
The discharging expenses in New York from steamer onto dock or lighters alongside steamer were before the war	$0.60–$0.80
To-day they amount to	1.80– 2.00
The lighterage expenses from steamer side to yards and railroads were before the war	.60
To-day they are	1.40

In view of all these increases connected with the importation of marble and stone from Europe it is impossible for imported marbles to compete against any of the marbles and stones produced in the United States.

Over 80 per cent of the marble consumed now in the United States is supplied by the domestic quarries.

The importation of foreign marbles, although of superior quality and higher decorative values, is negligibly small to-day, as foreign marbles are not able to compete against the domestic marbles where cost of construction is taken in

consideration and where quality, artistic, and decorative values have to stand in the background.

A higher tariff on blocks of marble and stone would further decrease the importation of foreign marbles and stones, and it would only tend to increase the prices for domestic production and would drive building costs still higher.

As a comparison we mention the following tables, giving the importations of marble and stone in blocks which were entered for customs duty in the United States:

1907	$1,088,188	1910	$1,116,058
1908	796,878	1911	1,042,285
1909	877,418		

The figures given for the years 1907 to 1911 represent the values for rough blocks and slabs only.

1912	$1,330,762	1915	$894,588
1913	1,898,940	1916	728,608
1914	1,335,672		

The figures given for the years 1912–16 represent the values for rough blocks, slabs, and finished work.

During the years 1917 and 1918 the importation of marble and stone in blocks came practically to a standstill.

During the year 1919 the importation of marble and stone, giving an approximate estimate, hardly amounted to more than 250,000 cubic feet.

During the year 1920 the importations of marble and stone into the United States will not amount to more than 250,000 to 300,000 cubic feet.

The present low building activity diminishes the importations of marble in blocks, as there is enough imported marble in stock in the different depots in the United States to supply even a brisk demand for imported marble to last for 10 to 12 months, and we predict that for the year 1921 the importation of marble will hardly amount to more than 150,000 cubic feet.

MARBLE SLABS.

The importation of marble slabs is confined to Carrara marble, as it is practically the only material which is able to stand the strain of transportation without great damage to the material and risk of breakage. However, the prices for sawn marble have not risen at Carrara in proportion with the prices of blocks.

The selling prices of slabs in Italy were always way below the prices of blocks plus sawing. The reason for it was and is that most of the blocks used for sawing slabs at Carrara are either defective or doubtful blocks. The blocks reserved for sawing at Carrara are not subjected to the expenses of scabbling and purging same of defects.

Marble slabs sawn abroad are produced in sawmills whose power is the inexpensive water power.

Small sawmills, primitively equipped, which have been erected during the past 25 to 50 years, some of them even 100 years ago, are still in operation, and most of them are located in the vicinity of the quarries.

It therefore results that on account of the great difference in price an unduly large amount of marble slabs is exported to the United States.

The large importation of marble slabs into the United States is a detriment to the marble manufacturers here, who have their own sawmills, and who have to buy high-priced marble blocks, and, furthermore, to sawmills which have been erected at great expense in this country to accommodate the trade in general, who buy blocks and have not their own sawing facilities.

Take as an example:

An average good second-grade block of Carrara marble can not be landed in New York (freight and duty paid) for less than ____ per cubic foot	$4.75
Cost of sawing (sawing includes delivery of marble to marble manufacturers' yard) ____ do ____	2.40
Total	7.15
12 saw-cuts produce 11 square feet of ¾-inch marble slabs, which brings the cost to ____ per square feet	.65

Marble slabs of second grade can be purchased to-day f. o. b. Leghorn for	per square foot	$0.23
Freight on same	do	.03
United States duty	do	.06
Total cost landed in New York	do	.35

Consequently a difference of over 85 per cent arises, to the detriment of the marble manufacturer in the United States, who buys a block and saws it in its own sawmill.

To explain this apparently disproportionate assessing the duty on sawn slabs as provided in tariff act of 1913 we wish to state the following:

When the tariff act of 1913 went into effect—

	Per cubic foot.
The cost of blocks was about	$1.30
Freights	.30
Duty	.50
Lighterage	.06
Total	2.16
Sawing	.85
Total	3.01

Eleven slabs per foot result in that a square foot of Carrara marble could be produced by buying the blocks and sawing them here, at 27½ cents per square foot.

	Per square foot.
Marble slabs sawn abroad could be purchased at that time f. o. b. Leghorn at	$0.12
Freight	.02
Duty	.06
Truckerage	.02
Total	.22

The price difference amounted to only about 20 per cent, and was not large enough for marble manufacturers to consider the importation of sawn slabs into this country in a large measure.

The increased cost of sawing in this country results from the following facts:

Sawmills have to stand to-day enormous burdens.

As a comparison we give you the cost of sawing during November, 1916, and November, 1920:

	November cost.	
	1916	1920
Sawyers, wages per hour	$0.52	$1.06¼
Helpers, wages per hour	.38	.86¼
Engineer, wages per hour	.35	1.00¼
Second engineer, wages per hour	.30	1.00¼
Fireman, wages per hour	.27½	.87½
Millwright, wages per hour	.45	1.00
Coal passer, wages per hour[1]		.69¼
Cranemen, wages per hour	.27½	.86¼
Yard helper, wages per hour	.30	.86¼
Coal, average, per ton	4.00	9.00-14.50
Unloading boats, per ton	.32	.90
Sand, per cubic yard	.75	2.75
Unloading boat, per cubic yard	.12	.65
Oil, gallon	.27	.70
Saw blades, per 100 pounds	1.65	3.65

[1] Was not imposed by union.

NOTE.—Labor compensation during 1916 amounted to $400 per year; during 1920, $1,080 per year.

Further increased taxations on real estate, State and Federal taxes, increased cost of repairs, increased cost to replace parts of worn-out machinery, and, further, diminished efficiency of labor tended to increase the cost of sawing marble in the United States.

To overcome this difference in cost of producing marble slabs in this country compared to the low cost of sawed slabs at Carrara, a proportionate increase in duties on marble slabs should be enacted; and we propose that the tariff marble slabs, sawed, should be changed to the following:

Marble slabs—

Sawed, not containing less than 4 superficial inches and not over 1 inch thick, per square foot	$0.10
If over 1 inch and not over 1½ inches thick, per square foot	.15
If over 1½ inches and not over 2 inches thick, per square foot	.20
If rubbed, in whole or in part, in addition per square foot	.04
Sawed or dressed slabs over 2 inches thick, per cubic foot	1.20

Marble paving tiles.—The present duty, according to tariff act of 1913, on imported marble tiles, classified in the tariff as specified under paragraph 97, provides that—

"The duty on paving tiles of marble or onyx, containing not less than 4 superficial inches, if not more than 1 inch in thickness, to be $0.06 per superficial foot.

"If more than 1 inch and not more than 1½ inches thick, $0.08 per superficial foot.

"If more than 1½ inches and not more than 2 inches thick, $0.10 per superficial foot.

"If rubbed, in whole or in part, $0.02 per superficial foot in addition."

This duty is in proportion to the value of the goods in themselves.

Marble tiles are made from slabs either unfit for shipment as such on account of defects, such as cracks or inferior quality, etc., or from pieces of marble slabs broken or damaged while being taken out of the saw frames or broken in yards of sawmills.

Tiles vary in size from about one-half a superficial foot to 6 superficial feet. Sizes change according to the demand and sizes of floors to be covered. Such small stock can be easily found in salvage of broken or defective slabs to make these tiles.

Tiles are either in thicknesses of ¾ inch or ⅞ inch or 1¼ inches. The same process to produce tiles is carried on by domestic quarry owners and marble manufacturers who have their own sawmills and produce marble slabs.

Prices at which these marble tiles are sold by domestic producers vary from $0.15 to $0.80 per square foot, according to the quality of the marble and sizes of tiles.

If the imported marble tiles are subjected to an increased duty it will eliminate the use of a sanitary and inexpensive floor material, and it will deprive the marble manufacturers of a commodity which is absolutely essential for their industry. Consequently the present tariff should remain in force and should read:

Marble tiles—	Per square foot.
If partly rubbed and not over 1 inch in thickness	$0.08
If not over 1½ inches thick	.10
If not over 2 inches thick	.12

Marble mosaics.—The present duty on marble mosaics not exceeding 2 cubic inches in size, if loose, is 20 per cent ad valorem.

With the great fluctuations in exchange it would be wiser to enact a specific duty of 5 cents per 100 pounds than to burden the customs officials with a lot of unnecessary work, which does not yield a sufficient revenue to pay even half the salary of an assistant appraiser.

Furthermore, it will eliminate a lot of unnecessary red tape connected with obtaining United States consular certificates of exchange values at date of shipment, as in the regions where mosaic is produced no United States consular office exists, and the United States consular office is 50 or 100 miles away, and certificates are not obtainable in time.

Shipments arrive in the United States and customs entry can not be made here in time, and it causes a lot of hardship to importers, while if based upon a specific duty of 5 cents per 100 pounds all the unnecessary red tape can be avoided.

The importation of marble mosaic is very limited and it forms only a very small item of the entire industry. Marble mosaics can not be produced in this country successfully, as marble manufacturers are not equipped and will not bother with the production of this commodity at any price. Only at Knoxville, Tenn., a small amount is produced, and it takes sometimes a year to have an order filled.

Marble mosaic is cut from small débris into small cubes of ½ inch or ⅝ inch or ¾ inch square.

The importation of marble mosaic is diminishing from year to year on account of the competition of ceramic tiles.

Good sanitary mosaic floors, practical and decorative in color and also in designs, can only be produced from marble mosaics, in which the different varieties in shades and colors well blended produce an artistic effect. It has the further advantage over the ceramic tiles that the floor is not slippery, but it is a soft treading floor and is indestructible.

Terrazzo—granito.—The present duty of 20 per cent ad valorem is inconsistent and out of proportion to the nature of the material. The article in itself is nothing but the waste débris of quarries, work shops and sawmills. Broken slabs, chips, etc., which can not be used for anything else, not even for road making, are used to make terrazzo or granito. It is the cleaning up of the accumulated débris at factories, which is ground up into granular particles, and these particles are packed in bags and shipped to this country. The material in itself has absolutely no value, and quarries abroad are only charging for the actual labor required in grinding up this débris.

Domestic quarries and marble manufacturers are making this terrazzo or granito in the same manner to clear up their quarries and work shops of débris.

The white granito or terrazzo produced in Vermont, Alabama, Georgia, and Massachusetts is sold at approximately $5 to $9 per net ton f. o. b. railroad cars the respective quarries.

Imported granito can not be sold in this country at these prices, as the cost of railroad transportation to seaports and the high freights are a great hindrance to large importations of this material. However, Carrara granito and colored marble granitoes are essential as top layers of terrazzo floors, as the granito made of domestic marbles is too soft, it wears out too quickly and discolors as soon as cement is applied.

A very good granito is produced in Tennessee. The price for same is about $10 per net ton on cars Knoxville. Tennessee granito is the only granito hard enough to be applied for floors, but on account of its color from light gray to dark brown, it does not find as much demand as the white granito, but it commands a higher price than any white granito or terrazzo produced in the United States.

Colored granito, such as red, yellow, green, black, and buff colored granito, is not produced in the United States, and is used sparingly as a mixture for terrazzo work.

A specific duty of 2½ cents per 100 pounds should be considered as a maximum, and this will yield the same revenue to the Government as the cumbersome ad valorem duty.

Free stone.—The present United States tariff (par. 99) reads:

"Free stone, granite, sandstone, limestone, lava, and all other stones suitable for use as monumental or building stone, except marble, breccia, and onyx, not specially provided for in this section; hewn, dressed or polished, or otherwise manufactured, 20 per cent ad valorem; unmanufactured or not dressed, hewn, or polished, 3 cents per cubic foot."

The importation of freestone or limestone of French and Italian or other origin coming under this classification amounted up to the war to an average of about 50,000 to 70,000 cubic feet per year, a negligibly small amount compared to the millions of cubic feet produced from the quarries in the United States.

Freestones, like the French limestones, viz, chassignelles, caen stone, lens stone, and the Italian limestone travertine, are all of the light, delicate shades, and are not produced in this country.

The high cost of transportation to seaports, high cost of freights, high cost of discharging and lighterage are twice as high as the prices at which Indiana limestone quarried at Bedford, Ind., and other quarrying centers in the United States is sold now by quarry owners at a good profit.

These foreign limestones are essential for architectural purposes, where architects desire to produce a decorative effect. An increased duty on these materials coming under this classification would eliminate entirely the importation of these materials.

To sum up our recommendations, we propose the following revision of tariff:

Marble, breccia, and onyx:	
In blocks, rough or squared only, per cubic foot	$0.50
Sawed or dressed, over 2 inches in thickness, per cubic foot	1.20

Full-sized slabs of marble or onyx:	
Containing not less than 4 superficial inches and if not more than 1 inch in thickness, per superficial foot	$0.10
If more than 1 inch and not more than 1½ inches in thickness, per superficial foot	.15
If more than 2 inches in thickness, per superficial foot	.20
If rubbed in whole or in part, in addition, per superficial foot	.04
Marble or onyx paving tiles containing not less than one-half superficial foot and not more than 6 superficial feet, sawed with rough edges only:	
If not more than 1 inch in thickness, per superficial foot	.05
If more than 1 inch and not more than 1½ inches in thickness, per superficial foot	.08
If more than 1½ inches and not more than 2 inches in thickness, per superficial foot	.10
If rubbed in part or in whole, in addition, per superficial foot	.02
Mosaics or marble or onyx not exceeding 2 cubic inches in size:	
If loose, per 100 pounds	.05
If attached to paper or any other material, 35 per cent ad valorem additional.	
Marble waste, crushed into granito or terrazzo, if loose, per 100 pounds	.02½
Marble waste, powdered, if loose, per 100 pounds	.02½
Freestone, granite, sandstone, limestone, lava, and all other stones suitable for use as monumental or building stones (except marble, breccia, any onyx) not specially provided for under this section: Unmanufactured or not dressed, hewn, or polished, per cubic foot	.03

C. D. JACKSON, *President and Treasurer.*
PISANI BROTHERS (INC.).
TABER & CO.

ANTHONY BENINATI, REPRESENTING LOCAL NO. 4, BRICKLAYERS, MASONS, AND PLASTERERS' INDUSTRIAL UNION.

Mr. BENINATI. We came here before this honorable committee to submit as short a brief as possible, inasmuch as we presented our case at an informal hearing before the United States Tariff Commission on July 29, 1918, where we stated fully our position and produced data appertaining thereon.

We wish to impress upon the honorable committee the conditions of the marble workers in the interior finished products of marble. It is a sad commentary that the marble industry in this country has got to compete with the low-priced manufacturers abroad, and, no matter what amount of duty could be put on, we would still be at a disadvantage. It is therefore most expedient, and we respectfully ask the honorable committee, to see that a proper duty be placed in order to help us in our deplorable condition, which has existed for so many years.

Mr. YOUNG. Has your organization any connection or alliance with foreign organizations?

Mr. BENINATI. No, sir.

Mr. YOUNG. You said something about an international——

Mr. BENINATI. That is, United States and Canada. It is especially in the decorative part of the industry that the less protection exists, especially ecclesiastical and mantel industry. Under certain conditions this ecclesiastical work comes in free of duty, because, as we have stated before the honorable Tariff Commission, it comes in as a donation, and we have no way or means whereby we could protect ourselves, because those articles are put into the institutions or churches—and there is nobody else to take care of us—such as altars,

pulpits, and altar rails, and the like of that. It being of a very elaborate character, it needs the full amount of workmanship and skill, and we have to make a study of it; and now, after so many years of study, we have no advantage over the foreign competition, which is almost 500 per cent less than what it is produced here for.

Mr. TREADWAY. You mean labor?

Mr. BENINATI. Labor as well as material. Material, of course, is down there.

Mr. TREADWAY. What do the men corresponding to your union get in Italy for the same class of work?

Mr. BENINATI. At the time we appeared here two and a half years ago they may have been getting 10 lires a day in Italy and 20 or 30 in France, but now, of course, they get a little over, but it will be no comparison to the wages paid to the American workers. It would be almost 200 per cent more.

Mr. YOUNG. At that time a lire was worth about 12 cents, wasn't it?

Mr. BENINATI. Yes; the lire, and more. To-day it is worth less than 3½ cents. If they get 25 lires to-day in comparison with the American wages of $10 and $11, you can figure out for yourself, gentlemen, what the comparison is.

Mr. HULL. All that kind of labor ought to be prohibited from coming into this country, too.

Mr. BENINATI. I should say it should, entirely. We have no way of protecting ourselves even if you gentlemen, as you will see from the brief we are submitting, would grant our request. We would not be fully equal with them, but nevertheless you can go too far with it as far as we can see, but it would be a great help to us. There are people who have made a life study of this, especially in my own line which I personally follow, serving a long apprenticeship at it, studying in modeling in wood, clay, and marble, and all such lines of business; and after so many years we find nothing but disappointment. Consequently we find that unless we have some sort of protection to compete with the European markets, we will never get in touch with it.

Mr. TREADWAY. How many members affiliate with your union?

Mr. BENINATI. I should say throughout the United States there must be between 12,000 and 13,000.

Mr. TREADWAY. Do you know anything about the difference in the quality of Italian marble and the American product?

Mr. BENINATI. I should say I do, sir.

Mr. TREADWAY. Well, we have had some testimony in that relation. I would be glad to have your opinion.

Mr. BENINATI. My opinion in that matter is that it is a matter of choice. Sometimes a scheme of colors enters into it, in the selection of it. It is not so much the quality or the nature of the stone as the color scheme that decides the selection of it. Of course, the Carrara marble is an independent material altogether; but here we can produce marble almost just as good. We have some in Alabama and we have some in Tennessee which comes in in good stead. In fact, it stands climatic conditions here far better than does the outside, the European marble.

Mr. TIMBERLAKE. How does it compare for interior work?

Mr. BENINATI. On interior work, well, the same as ornamental work on the exterior, too, which that material is used for also, it is

usually just as satisfactory. But, as we stated before the honorable United States Tariff Commission, there was a catalogue sent broadcast that a statue 7 feet high could be sold right here free of duty for $160. That was at the time we made that statement before the United States Tariff Commission, here we would have been at a disadvantage to produce it for $1,000. Why, we could not get the marble for $160.

Mr. YOUNG. What do you mean by statue?

Mr. BENINATI. A statue, an ecclesiastical figure, or any other kind of symbolical figure of any kind, such as you see in monumental yards. They come by the freight load, by the cargo here. You can see in every cemetery yard. They are being imported for a very small, nominal sum. These houses can produce them. Not only that, we have to compete with their agents that they have here who go about and ask for work, and then they send back to Italy, France, or Belgium, wherever they can get it cheaper, and import it here under some subterfuge, either as a donation or anything of that kind, free of duty.

Mr. RAINEY. You know of any Italian statues here in Washington, or in this vicinity, that were sold for $160? I would like to see one.

Mr. BENINATI. I should think, Mr. Chairman and gentlemen, that in some cemeteries you will be able to see them. We left that data with the United States Tariff Commission, and the very catalogue, which is at your disposal, being left with them, could show to you that it could be purchased in the open market. So, whether it is in Washington or elsewhere, it can be purchased.

Mr. RAINEY. I wanted to see, to see what kind of a looking thing a statue 7 feet tall that came across the seas and sold here for $160 was.

Mr. BENINATI. It is an undeniable fact, because at that time we produced the catalogue of the house of Benziger Bros., in Bartlett Street, on July 29, 1918, showing that anybody could buy it.

Mr. YOUNG. How many feet high?

Mr. BENINATI. It would take a block about 7 feet high, 3 by 3. That means 63 cubic feet of marble.

Mr. RAINEY. You mean a finished statue?

Mr. BENINATI. The finished product. Now, gentlemen, you can see what advantage we can have over those conditions.

One point I wish to bring out is this, that our craft almost two-thirds of the time are idle. We should be protected on all that ecclesiastical work and mantel work. We have no reference, of course, to genuine antique work that would be of an educational or artistic character. But, in the commercial line, even in the highest grade, we can produce exactly the same thing, if not better.

Mr. TREADWAY. I understood you to say that that statue was in a circular left with the Tariff Commission?

Mr. BENINATI. Yes, sir.

Mr. TREADWAY. At $160?

Mr. BENINATI. $160.

Mr. TREADWAY. So that is in their files?

Mr. BENINATI. Yes, sir.

Mr. RAINEY. What was that statue going to be used for?

Mr. BENINATI. Well, it may be used on a monument or some altar for ecclesiastical purposes.

Mr. RAINEY. I should think that simply would scare them out of the church if it was as inartistic as that.

Mr. BENINATI. Maybe so. Some of these are done pretty fair, but you see they make so many at once that naturally they can produce them cheaper. The marble is right there to hand. They have to pay nothing at all on it; and the consequence is the competition is so keen that we can not meet it.

The CHAIRMAN. Mr. Beninati, do I understand you to say that our marble, domestic marble, is just as good for inside finish as Italian marble?

Mr. BENINATI. I should say it is.

The CHAIRMAN. The gentleman who was here yesterday or the day before contended it was not. Of course, it is a matter of choice.

Mr. BENINATI. It is a matter of choice or taste, as I said before, Mr. Chairman.

The CHAIRMAN. Its lasting qualities and everything are just as good?

Mr. BENINATI. Yes. As I said before, the color scheme sometimes enters into the selection of it. It is nothing else. But I wish to impress upon you the fact that the American workmen here—who have made their homes right in this country and who can produce just as good, if not better, work—two-thirds of the time are idle.

The CHAIRMAN. Do you recommend any rate of duty?

Mr. BENINATI. I do, as I say.

The CHAIRMAN. Have you got it in your brief?

Mr. BENINATI. Yes.

Mr. RAINEY. How are you going to arrive at the value of a marble statue so as to assess 200 per cent on it?

Mr. BENINATI. Well, if it is of a commercial nature, of course, you could come to it; but if it is of an artistic nature, you know how it is, they will place any kind of value on it.

Mr. RAINEY. Did the $160 statue you are talking about have any artistic merit?

Mr. BENINATI. Sometimes it has, sometimes it has not.

BRIEF OF ANTHONY BENINATI, REPRESENTING LOCAL NO. 4, BRICKLAYERS, MASONS, AND PLASTERERS' INDUSTRIAL UNION.

WASHINGTON, D. C., *January 11, 1921.*

GENTLEMEN: The undersigned, representing the workers of the interior, plain, and decorative finished marble products of the United States, respectfully request that the tariff on imports of the above-described nature be increased to 100 per cent, which, while it may seem extraordinary, still it would hardly compare with the cheap cost of said products in the European markets.

We have explained in detail our arguments in favor of such protection to the American manufactured work to the United States Tariff Commission at an informal hearing on July 29, 1918, leaving with that honorable commission practical data in the form of photographs of work completed in the American establishments and oral explanations, reference to which would convince the committee of the fairness and justice of our request.

We also respectfully wish to state our full concurrence to the last two paragraphs of the brief submitted to your honorable committee by the National Association of Marble Dealers, through its president, Mr. John Stephen Sewell, in reference to the above petition.

We earnestly and respectfully request of your honorable committee careful consideration of the two documents mentioned herein.

BRIEF OF THE ITALIAN CHAMBER OF COMMERCE IN NEW YORK.

This chamber most strongly recommends that the 45 per cent duty now in effect on marble and alabaster, wholly or partly manufactured into monuments, benches, vases, and other articles, and the rates respectively of 3 cents per cubic foot on unmanufactured free stone or limestone and of 25 per cent on the same hewn, dressed, or polished or otherwise manufactured, be continued unchanged. This chamber feels that, in the case of the unmanufactured material, the high cost of transportation gives ample protection to domestic quarry owners, while it does not compete with any other domestic material on account of the different character, either in shade or in other qualities of the imported. Likewise in the case of the manufactured article the present rates of 45 per cent for marble manufactures and of 25 per cent for freestone or limestone, are sufficient cover for protection and at the same time yielding for revenue.

There was at one time an impression prevalent that the importation of these goods, especially of those that are now admitted free for religious purpose, was showing an alarming increase. This, however, is not true, the tendency having been, on the contrary, in the opposite direction for obvious reasons due to war conditions. This chamber feels that the importation of the various works of art coming in under paragraph 98 should be encouraged both for their artistic value as well as the benefit of art and home.

FINISHED MARBLE.

[Paragraphs 98, 376, 652.]

BRIEF OF THE NATIONAL ASSOCIATION OF MARBLE DEALERS.

The undersigned National Association of Marble Dealers, comprising in the form of actual members or cooperating concerns, practically all of the American producers, many nonmanufacturing dealers, and the great majority of American manufacturers except those located in New York City and San Francisco, respectfully request that the duty on finished marble of all kinds except genuine original sculptures and statuary be increased to at least 75 per cent ad valorem. An increase to 100 per cent would still leave us under a severe handicap, due to cheaper labor and freight.

We also request that whatever duty may be levied on finished marble be also made to apply to articles of finished marble presented to churches and other religious bodies, which are often admitted free of duty, under an unjustifiable classification as works of art, under paragraph 655 of the present tariff.

There is a very considerable business in the importation of statuary, carvings, mantels, etc., for private homes or public buildings, and of altars, fonts, etc., for churches and other religious institutions. These importations often pay 15 per cent ad valorem as sculptures under paragraph 376 of the tariff law or are admitted duty free as works of art under paragraph 652. As a matter of fact the great majority of them are purely conventional in their character; there are many manufacturers in this country whose staffs of skilled cutters and carvers can equal the standard of workmanship exhibited by the best of those imported articles and can surpass that exhibited by many of them. They are usually purchases made by wealthy persons for themselves or as gifts for religious or other institutions. Whether they are made of foreign marbles or not it is only fair to ask that the capital and workmen of this country have a chance to compete for this work. This they can not possibly do under present conditions, due to the great disparity between wage rates here and in Italy. We have nothing to say against the free importation of genuine works of art or of real antiques. But current conventional work, however high its class, can be as well produced here as anywhere, and it is no burden upon the public to levy a reasonable tariff upon it with that end in view and with the purpose of getting revenue directly for the Government from that portion which would no doubt still come in. The productions referred to can only be true works of art if they are sculptures, and sculptures are only the individual production of professional sculptors. (See United States *v.* Olivotti & Co., United States Custom Court of Appeals, Mar. 28, 1916, T. D. 36309, and United

States *v.* Downing, United States Custom Court of Appeals, Feb. 21, 1916, T. D. 36197.) We respectfully request that the tariff on this class of importations be fixed at not less than 75 per cent ad valorem.

JOHN STEPHEN SEWELL, *President.*

Alabama Marble Co., Gannts Quarry, Ala., John Stephen Sewell, president; Moretti Harrah Marble Co., Sylacauga, Ala.; Georgia Marble Co., Tate, Ga.; Vermont Marble Co., Proctor, Vt.; Clarendon Marble Co., West Rutland, Vt.; Middlebury Marble Co., Brandon, Vt.; Alamoro Marble Co., New Mexico; Gray Eagle Marble Co., Knoxville, Tenn.; Gray Knox Marble Co., Knoxville, Tenn.; Ross & Republic Marble Co., Knoxville, Tenn.; Knoxville Marble Co., Knoxville, Tenn.; J. J. Craig Co., Knoxville, Tenn.; Holston Marble Co., Knoxville, Tenn.; Thrasher Marble Co., Knoxville, Tenn.; Candora Marble Co., Knoxville, Tenn.; Tennessee Producers' Marble Co., Knoxville, Tenn.; Appalachian Marble Co., Knoxville, Tenn.; Vermont Marble Co. of Texas, Dallas, Tex.; Phenix Marble Co., Kansas City, Mo.; Carthage Marble & White Lime Co., Carthage, Mo.; Consolidated Marble & Lime Co., Carthage, Mo.; Carthage Quarry Co., Carthage, Mo.; Missouri Quarries Co., Carthage, Mo.; Lautz McNerney Co., Carthage, Mo.; Spring River Stone Co., Carthage, Mo.; Carthage Marble & Building Stone Co., Carthage, Mo.; Vermont Marble Co., Tokeen, Alaska; Mount Nebo Marble Co., Salt Lake City, Utah; Babcock & Willcox, Kasota, Minn.; Breen Stone Co., Kasota, Minn.; White Marble & Terrazzo Co., Lee, Mass.; Westfield Marble & Sandstone Co., Westfield, Mass.; South Dover Marble Co., New York, N. Y.; Silverdale Stone Co., Silverdale, Kans.; Columbia Marble Co., San Francisco, Calif.; Michigan Verde Antique Marble Co., Ishpeming, Mich.; Ozark Marble Quarries Co., St. Louis, Mo.; T. G. Schrader Sons Marble & Granite Co., St. Louis, Mo.; Pfeiffer Stone Co., St. Joseph, Mo.; Eastman Quarries Co. (Inc.), Rutland, Vt.; Bluff Point Stone Co. (Inc.), Plattsburg, N. Y.; Cedar Park Stone Co., Austin, Tex.; West Stockbridge Marble Works, Lee, Mass.

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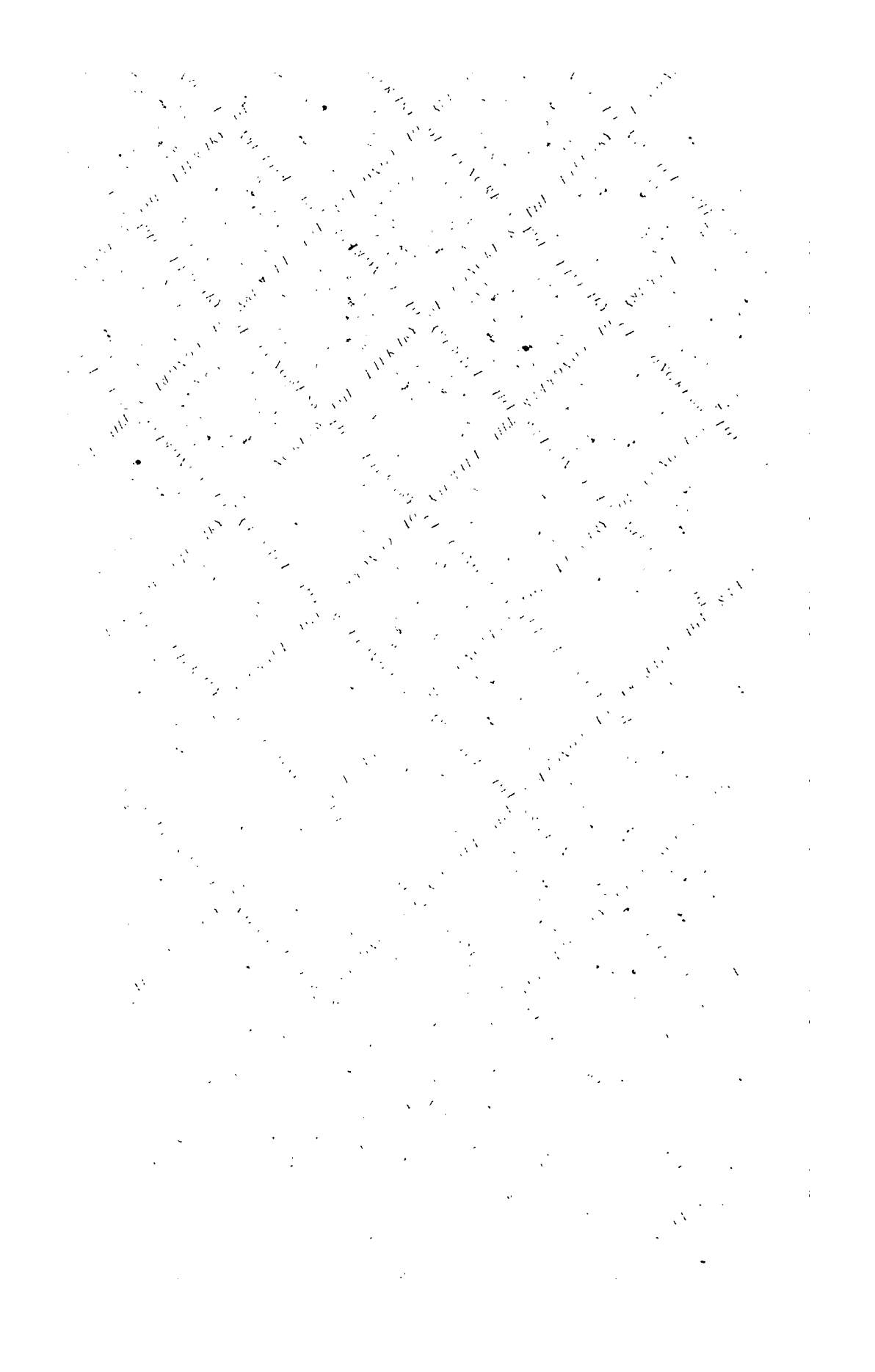

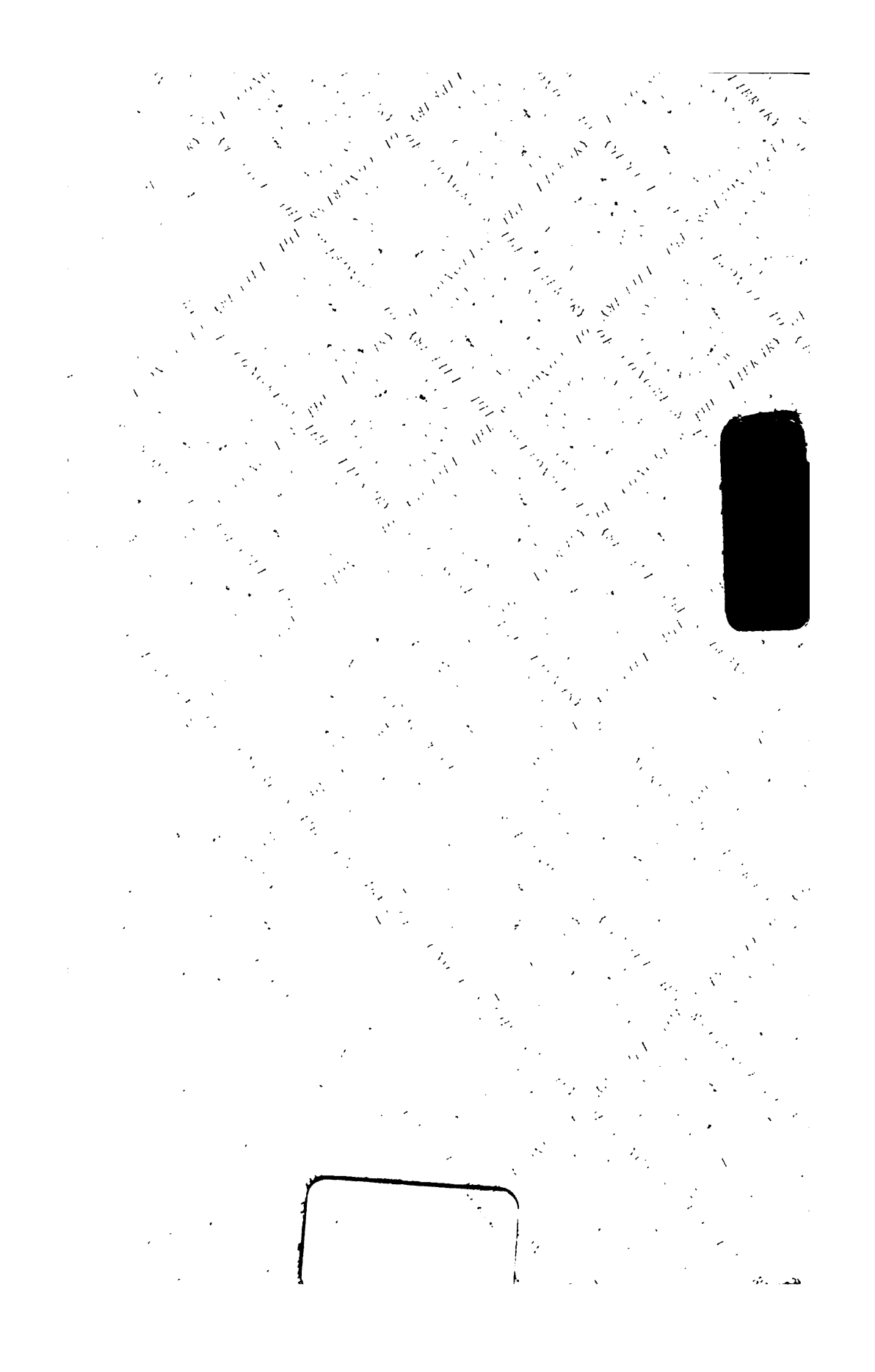

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